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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**FROM TRAGEDY TO STRATEGY:
ASSESSING THE FDNY'S POST-9/11 STRATEGIC
PLANNING PROCESS**

by

Jonathan P. Pistilli

December 2016

Thesis Advisor:
Second Reader:

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**FROM TRAGEDY TO STRATEGY:
ASSESSING THE FDNY'S POST-9/11 STRATEGIC PLANNING PROCESS**

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Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(HOMELAND SECURITY AND DEFENSE)**

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ABSTRACT

All Fire Department of the city of New York (FDNY) strategic plans have been formulated using the same process, implemented in the post-9/11 environment. The process must be assessed to ensure it supports the FDNY's mission in an environment that has significantly changed and continues to evolve.

Since September 11, 2001, significant weather events, including blizzards, hurricanes, and Super Storm Sandy, have challenged the FDNY's capabilities and magnified the threat of global climate change. Terrorism keeps evolving; the use of fire as a weapon and active shooter tactics push the boundaries of the FDNY's response paradigms. Its core responsibilities are changing, with fire-related incidents dropping steadily and medical incidents rising significantly.

The FDNY has risen to all these challenges, analyzing and adapting to threats, innovating and adopting new technology, improvising and adjusting tactics, and modifying and amending operations. However, in the twelve years since its first strategic plan, strategic planning at the FDNY has not evolved to include a long-term perspective with future-oriented goals and effective performance metrics to stay ahead of the evolving environment. Implementing the recommendations in this thesis will re-align and update the process, incorporating current concepts that will improve FDNY strategic planning now and in the future.

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LIST OF ACRONYMS AND ABBREVIATIONS

AG	Accountability Group
BCG	Boston Consulting Group
BCG-PP	BCG Project Axiom planning process
CTDP	Center for Terrorism and Disaster Preparedness
EMS	Emergency Medical Services
FDNY	Fire Department of the City of New York
FD-SPP	FDNY Strategic Planning Process
POC	Planning Oversight Committee
PSPP	Preferred Strategic Planning Process
PWG	Planning Work Group

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EXECUTIVE SUMMARY

After the unimaginable tragedy of 9/11, the Fire Department of the City of New York (FDNY) began a top-to-bottom assessment of the entire Department's response and what it revealed about its ability to respond to all-hazard events. Despite the enormity of the tragedy, the FDNY recognized the opportunity to change and grow. Organizations rarely have a chance to rebuild in an environment of almost universal political and financial support. The tragedy of 9/11 forced the FDNY to critically examine the entire organization, honestly and realistically gauge its capabilities, and identify the dramatic changes necessary to adequately respond to unknown and asymmetric all-hazards threats in the future. Formulating a strategy to implement these changes was a top priority.

The City of New York and the FDNY commissioned world-renowned consultants McKinsey & Company to conduct a study of the Department's response on 9/11 and make recommendations for how to improve its preparedness in the future.¹ One of McKinsey & Company's recommendations was to enhance planning and management processes by creating "a formal Annual Plan, consisting of clear objectives, along with initiatives designed to meet those objectives."² The FDNY embraced and expanded on this recommendation, producing five strategic plans to date, in addition to several bureau plans and Department-wide concept documents.

(1) Problem Statement and Research Question

All of the FDNY strategic plans have been formulated using the same process, implemented in the post-9/11 environment. The process must be assessed to ensure it supports the FDNY's mission in an environment that has significantly changed and continues to evolve. This thesis answers the question: how well did the FDNY develop and implement a formal strategic planning process in the context of their unique operating environment after September 11, 2001, and what changes are required to ensure

¹ Daniel Shacknai and Meta Ribowsky, "History of Strategic Planning at FDNY," *WNYF*, 2011, 14.

² McKinsey & Company, *Increasing the FDNY's Preparedness* (New York: McKinsey & Company, August 19, 2002), 77, http://www.nyc.gov/html/fdny/html/mck_report/toc.shtml.

its relevance in current and future environments? This thesis clarifies what policy/process modifications are required to improve the FDNY's strategic planning process.

(2) Review and Analysis

The formulation and application of a strategic planning process grew out of the McKinsey report prepared for the FDNY just after 9/11 and was used to create all FDNY strategic plans to date. The process is reviewed, along with a report prepared for the FDNY by the Boston Consulting Group (BCG). The plans each produced and several bureau or command strategic plans are detailed.

The analysis begins with the creation of a baseline strategic planning process and the weighting of its elements: components and characteristics. The FDNY process is compared to the baseline process, the BCG Project Axiom process to the baseline process, and the FDNY process to the BCG Project Axiom process. Results are categorized by the impact they would have on the total planning process if improved. Precipitating factors and motivators are subjectively identified, as are the costs, benefits, obstructions, and impact of maintaining, eliminating, improving, or implementing the element at the FDNY.

(3) Recommendations

Recommendations are formed based on the analysis and interpretation of their overall positive impact to the strategic planning process, relative costs, and the perceived effort required to implement them. They are sorted within functional categories used throughout this thesis: pre-formulation, formulation, planning, implementation, and management, with the exception of characteristics, which are incorporated into the category they most impact. Implementing these recommendations will align the FDNY strategic planning process elements with those in the preferred strategic planning process.

(4) Conclusions

The all-hazard environment in which the FDNY operates continues to evolve after 9/11. Significant weather events and terrorism push the boundaries of the FDNY's response paradigms. Its core responsibilities are changing, with fire-related incidents

dropping steadily and medical incidents rising significantly. Additionally, the FDNY continues to experience mission creep into other domains of public service. The Department has risen to all these challenges, adapting to threats and amending operations when needed. However, in the twelve years since its first strategic plan, strategic planning at the FDNY has not evolved to include a long-term perspective with future-oriented goals and effective performance metrics.

Current theories on strategic planning consider the planning process itself as more important to the organization than the plans they produce. By improving strategic thinking, the FDNY can develop the important combination of creative and analytical perspective in leaders and managers to synthesize strategies for its future. The recommendations all focus on improving the strategic planning process and strategic thinking. Implementing them will allow the Department to create more effective strategic plans and encourage strategic thinking now and in the future. The revised process that results can serve as a template for strategic planning in other public service agencies.

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I. INTRODUCTION

The terrorist attacks on September 11, 2001, were a seminal event for the United States. They changed the world as we knew it, and ushered in a threat environment we had never experienced. This was especially true for those who live and work in New York City, and no more so than for the Fire Department of the City of New York (FDNY).

The combination of planes striking the twin towers of the World Trade Center and their subsequent collapse killed over 2,800 innocent people. Cantor Fitzgerald, an investment bank occupying several floors of the North Tower, lost 658 employees. Marsh Inc., also located in the North Tower, lost 295 employees and 63 consultants. The FDNY as an organization suffered the next biggest loss of life, with 343 members killed in the line of duty that day, *all of whom responded to the scene after the attack*.¹

The significant number of experienced senior firefighters, executive managers, and inspirational leaders among the victims compounded the FDNY's loss. The attack killed the first deputy commissioner, the chief of department, the chief of hazardous materials (HazMat) operations, and the FDNY chaplain—all revered throughout the department—dealing a devastating blow to the FDNY's organizational continuity and collective psyche. One thousand more firefighters than usual retired within two years after 9/11, some due to disability secondary to the attacks, and some due to increased pensions as a result of overtime incurred during the recovery.²

Despite the enormity of the tragedy, the FDNY recognized the opportunity to change and grow. Organizations rarely have a chance to rebuild in an environment of almost universal political and financial support. The tragedy of 9/11 forced the FDNY to critically examine the entire organization, honestly and realistically gauge its capabilities, and identify the dramatic changes necessary to adequately respond to unknown and

¹ "9/11 by the Numbers," *New York Magazine*, September 15, 2002, http://nymag.com/nymetro/news/sept11/features/n_7692/.

² The New York City Retirement System (NYCERS) did not grant a waiver to change pension calculations from "last three years" to "highest three years." See Appendix A.

asymmetric all-hazards threats in the future. Formulating a strategy to implement these changes was a top priority.

Prompted by a recommendation in the 2002 McKinsey & Company report *Increasing the FDNY's Preparedness*, the FDNY formalized a strategic planning process that led to its first strategic plan in 2004.³ For the first time, the FDNY published a high-level, future-focused, organization-wide plan delineating strategic goals, setting up benchmarks to achieve them, and incorporating a review process to ensure the benchmarks were met and the goals remained relevant and desired. The FDNY continues this process today, having now produced five successive strategic. In 2012, they commissioned the Boston Consulting Group (BCG) to analyze the Department and make recommendations for the future. This thesis examines the processes that produced the McKinsey and BCG reports and all five strategic plans in the fifteen years since September 11, 2001.

The researcher hopes to honor those who made the ultimate sacrifice that fateful day by sharing the findings, conclusions, and recommendations to improve the process with other public service/response agencies so they may use this analysis to replicate the successes and learn from the shortcomings of the FDNY strategic planning process.

A. PROBLEM STATEMENT

Reeling from the unimaginable disaster of 9/11, and facing a new and formidable threat, the FDNY had to recover, rebuild, and realign its focus to this new threat environment while maintaining high standards of performance in its broad existing mission. The FDNY must perform as a *high reliability organization*⁴ due to the low-probability/high-consequence risk environment in which it operates and the life-and-death implications of its daily operations. And it must do so in New York City, which

³ McKinsey & Company, *Increasing the FDNY's Preparedness* (New York: McKinsey & Company, 2002), 77, http://www.nyc.gov/html/fdny/html/mck_report/toc.shtml.

⁴ High reliability organizations “have no choice but to function reliably. If reliability is compromised, severe harm results.” Karl E. Weick and Kathleen M. Sutcliffe, *Managing the Unexpected: Resilient Performance in an Age of Uncertainty* (Hoboken, NJ: John Wiley & Sons, 2011), ix.

“remains a primary terrorist target due to its size, concentration of significant critical and economic infrastructure, and stature as an icon of the nation’s history and ideals.”⁵

The FDNY strategic plans were formulated using the process implemented in the immediate post-9/11 environment. The strategic plans themselves have garnered much attention over these years, but the process of creating them has not. The strategic plan creation process—for the first report or any succeeding reports—has never been analyzed for effectiveness, despite the evolving environment. The FDNY strategic planning process must be assessed to ensure it produces plans that facilitate the FDNY’s ability to meet its mission in the dynamic, evolving domains in which the FDNY operates.

Strategic planning as a discipline has evolved significantly since the FDNY first embraced it. New theories and studies have discovered the impact of the strategic planning process is often significantly more important than the strategic plan itself in improving organizational performance.⁶ They have also highlighted ways the strategic planning process can positively influence other parts of the organization by exposing employees to strategic planning concepts and by encouraging strategic thinking, learning, and awareness.

The process of strategic planning is difficult and expensive, requiring significant time commitment from leaders, managers, planners, and those responsible for implementing the plan throughout the organization. The analysts must mine the appropriate data and synthesize it into useful information based on a deep understanding of the organization and its environment. Many fire departments and other public service agencies have implemented a strategic planning process, and very few studies address their effectiveness. Many public agencies, still, would like to implement a strategic planning process but do not have the resources to explore different approaches until they find one that works.

⁵ Center for Terrorism and Disaster Preparedness (CTDP), *Terrorism and Disaster Preparedness Strategy* (New York: FDNY, 2007), 9.

⁶ Eton Lawrence, *Strategic Thinking: A Discussion Paper* (Halifax, NS: Public Service Commission of Canada, 1999), 124, https://docs.google.com/file/d/0B5pJhkVFwvzoNDgzMTc0YjctNWUwZi00NGI5LTljMDktY2ZmNTJlZTI1OGM1/edit?hl=en_US&pli=1.

B. RESEARCH QUESTION AND DESIGN

This thesis answers the question: How well did the FDNY develop and implement a formal strategic planning process in the context of their unique operating environment after September 11, 2001, and what changes are required to ensure its relevance in current and future environments? This thesis clarifies what policy/process modifications are required to improve the FDNY's strategic planning process.

(1) Selection Criteria

All five of the FDNY strategic plans and one external study were the selected samples. The BCG Project Axiom report was included, as it is more of a strategic plan than a report; and the McKinsey report was excluded, as it is more of a gap analysis than a strategic plan. Selection of process elements was based on their significance as identified in scholarly writings, peer-reviewed studies, and articles on strategic planning in the public sector, or as cited by prominent authors.

(2) Data Sources

The primary data sources consisted of published open-source documents, including the strategic plans themselves, annual reports, FDNY statistical data, and published descriptive accounts. Secondary data sources included academic studies and theses, and literature on strategy, strategic planning, and associated topics. Additional data sources included internal FDNY documents and specific data provided by relevant bureaus, commands and units of the FDNY.

(3) Type and Mode of Analysis

A multi-goal policy analysis methodology was used to answer the research question. The research included a comprehensive review of the extensive strategic planning literature and its associated topics, including the strategic planning process, strategic thinking, strategy formulation, strategic plan formulation and implementation, and strategic management. In-depth reviews of the strategic planning process at the FDNY and all five strategic plans it produced, as well as the process that created the McKinsey report and the BCG Project Axiom report, followed.

A baseline strategic planning process was created for analysis, and the processes used to create each of the plans were compared against it, as was the plan each produced. Findings of each comparison were then contrasted against each other. Variations between the plans and the baseline, in addition to variations between the plans, were considered variables in the subjective analysis conducted of each. Conclusions and recommendations were posited based on the subjective analysis, including these variables.

(4) Purpose

This research intended to identify strategic planning process elements to continue, eliminate, improve, or implement in the FDNY strategic planning process; the outcome contributes to the study of strategic planning in public service/response agencies due to its scope and environment. The FDNY has a 150-year history, and is the largest fire department serving the largest population in the United States.⁷ Rebuilding and realigning an emergency response agency of this size after its devastating loss on 9/11 is unprecedented. This analysis provides a unique retrospective understanding of how, why, and how well the FDNY implemented strategic planning under those circumstances and afterward. The findings and recommendations provide both positive and negative examples for other public service/response agencies that are considering developing or updating their strategic planning processes.

(5) Limitations

The researcher acknowledges the variability present in selecting a qualitative study of this nature, the ambiguity in the comparative analysis and the subjective measure of comparative alignment, as well as the potential for both personal and professional bias as a high-ranking member of the FDNY. The researcher is a reflective emergency response practitioner with thirty-three years of direct experience who understands the environment and the organization, and has compared the FDNY strategic planning process to what the scholars and literature identify as important.

⁷ “Ten U.S. Cities Now Have 1 Million or More People/ California and Texas Each Have Three of These Places,” U.S. Census Bureau, May 21, 2015, <http://www.census.gov/newsroom/press-releases/2015/cb15-89.html>.

The finite amount of scholarly research and peer-reviewed studies on the effectiveness of strategic planning in the public sector limits the comparative analysis of the desired steps and organizational characteristics relative to the strategic planning process.

C. CHAPTER OVERVIEW

Chapter II presents an in-depth review of the literature on strategy, strategy formulation, and strategic planning, and their associated concepts. Chapter III comprehensively reviews strategic planning in the FDNY since September 11, 2001, including the process used to formulate the five FDNY strategic plans and two external reports commissioned by the FDNY, in addition to the plans and reports themselves. Chapter IV is a qualitative analysis of the strategic planning process at the FDNY and how it compares to a preferred process extrapolated from the literature and to one of the external reports. Chapter V interprets the analysis results, including a subjective cause-and-effect relationship. Chapter VI provides recommendations to continue, eliminate, improve, or implement components or characteristics of the strategic planning process at the FDNY.

II. LITERATURE REVIEW

The literature on strategy and strategic planning and their associated concepts is incredibly broad and deep, dating back to 500 BC with Sun Tzu's *The Art of War*.⁸ The concept has been used extensively in the military since then, and made its way into the business world in the 1950s.⁹ The Department of Defense implemented the Planning-Programming-Budgeting System (PPBS) in the 1960s, which spawned several adaptations in the public sector, mainly at the state level. The use of strategic planning in the private sector has exploded since, and its use in the public sector has grown steadily, but at a much slower pace.

This literature review is presented in four parts. First is a review of the origins, definitions, and relative perspectives on strategy. Next is a review of the many perspectives on how strategy is formulated and how it actually forms in organizations. Third is a deeper review of strategic planning concepts, including the strategic planning process and plan formulation, and strategic management. Finally, the fourth part presents conclusions.

A. STRATEGY

The word strategy derives from the Greek “στρατηγία” (strategia), “office of general, command, generalship.”¹⁰ The tribes in ancient Greece elected a *strategos* to head their regiment of soldiers. The *stratego*i “gave ‘strategic’ advice about managing battles to win wars, rather than ‘tactical’ advice about managing troops to win battles.”¹¹ The etymology infers a broader perspective than *tactics*, and therefore a higher level of thinking.

⁸ Marylynn Placet and Kristi Branch, “Management Benchmark Study,” Air University, June 8, 2002, 1, <http://www.au.af.mil/au/awc/awcgate/doe/benchmark/>.

⁹ Ibid.

¹⁰ Henry George Lidell and Robert Scott, “A Greek-English Lexicon: Στρα^τηγ-ία,” Tufts University, accessed March 18, 2015, <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.04.0057%3Aentry%3Dstrathgi%2Fa>.

¹¹ Phillip Blackerby, “History of Strategic Planning,” *Armed Forces Comptroller*, Winter (1994): 23.

Demarcating strategy from tactics grew out of the need to differentiate between planning/executing an *engagement*, and coordinating multiple engagements with each other in order to further the object of the war. Helmuth von Moltke conceptualized the *operations* level of war to capture the level in between strategy and tactics.¹² The operational level of war developed as a practical concept to frame the decision-making and planning required by commanders engaged in multiple battles, but not of the war as a whole or of a specific battle.

Thus, three levels of thinking are widely accepted in reference to warfare: strategy, operations, and tactics. The levels are also commonly reflected in business strategy as enterprise or corporate level, business or business-unit level, and functional or market level respectively. Traditionally, there is a hierarchical arrangement of strategy above operations and operations above tactics, and they are relative to one another. However, this arrangement must be viewed in context; the viewer's perspective changes as their hierarchical level within the organization changes.

From upper management's perspective, decisions that affect the entire organization are strategic and decisions made by lower management are operational or tactical. Those operational or tactical decisions are perceived as strategic from the lower management's perspective if they affect their entire component of the organization. As organizational theorist Russell Ackoff explains: "'Strategy' and 'tactics' are relative concepts depending on the organizational level at which the defining is done."¹³

A simple and coherent model of strategy is expressed by Art Lykke of the U.S. Army War College as *strategy = ends + ways + means*.¹⁴ In this model, ends are objectives—what is to be accomplished; ways are the strategic concepts—how the objectives are to be accomplished; and means are the resources, both tangible (forces,

¹² Martin Dunn, "Levels of War: Just a Set of Labels?," Clausewitz.com, accessed August 24, 2014, <http://www.clausewitz.com/readings/Dunn.htm>.

¹³ Russell L. Ackoff, *Redesigning the Future: Systems Approach to Societal Problems*, 1st ed. (Hoboken, NJ: John Wiley & Sons, 1974), 523.

¹⁴ Richard Yarger, *Towards a Theory of Strategy: Art Lykke and the Army War College Strategy Model* (Carlisle, PA: U.S. Army War College, 2008), 48.

people, equipment, money, facilities) and intangible (will, courage, spirit, intellect) with which the objectives will be attained.¹⁵

A plethora of definitions, concepts, and perspectives on the meaning of the word strategy have evolved over time. Ackoff writes: “Most authors who discuss strategy do not define it; most of the definitions are in disagreement, and most of the definers do not acknowledge the existence of such disagreement.”¹⁶ A sampling from some of the most prominent authors in the field includes Carl von Clausewitz, who defines strategy as: “the art of the employment of battles as a means to gain the objective of war.”¹⁷ Moltke defines it as “the practical adaption of the means placed at a general’s disposal to the attainment of the object in view.”¹⁸ Liddell Hart’s definition, also from a military perspective, is: “the art of distributing and applying military means to fulfill the ends of policy.”¹⁹

Moving away from the military association, George Steiner points to a number of definitions, indicating there is very little agreement as to the meaning of strategy:

- Strategy is that which top management does that is of great importance to the organization.
- Strategy refers to basic directional decisions, that is, to purposes and missions.
- Strategy consists of the important actions necessary to realize these directions.
- Strategy answers the question: What should the organization be doing?
- Strategy answers the question: What are the ends we seek and how should we achieve them?²⁰

In the business sector, Porter’s Five Forces tool is a popular example; Michael Porter defines competitive strategy as “a broad formula for how a business is going to compete,

¹⁵ Ibid., 49.

¹⁶ Ackoff, *Redesigning the Future*, 521.

¹⁷ Carl von Clausewitz, *On War*, indexed ed. (Princeton, NJ: Princeton University Press, 1989), 241.

¹⁸ Fred Nickols, “Strategy: Definitions and Meaning,” accessed July 19, 2013, http://www.nickols.us/strategy_definition.htm.

¹⁹ Ibid.

²⁰ Ibid.

what its goals should be, and what policies will be needed to carry out those goals.”²¹ Ackoff delves deeper into an organization’s specific strategy, defining it as “those decisions that are made by its highest level of management and that affect the organization as a whole.”²²

Strategy can also be defined as it relates to patterns. Thompson and Strickland define strategy as “the pattern of organizational moves and managerial approaches used to achieve organizational objectives and to pursue the organization’s mission.”²³ John Bryson states strategy is “a pattern of purposes, policies, programs, actions, decisions, or resource allocations that define what an organization is, what it does, and why it does it.”²⁴ Henry Mintzberg lists five definitions, known as the *Five Ps for Strategy*, in which he indicates strategy is a:

- *Plan*, a direction, a guide or course of action into the future, a path to get from here to there.
- *Pattern*, consistency in behavior over time.
- *Position*, the locating of particular products in particular markets.
- *Perspective*, an organization’s fundamental way of doing things.
- *Ploy*, a specific “maneuver” intended to outwit an opponent or competitor.²⁵

It is clear from these definitions that strategy is considered many things, depending on in the context in which it is described and the author’s perspective. However, common themes that emerge from the definitions include: a high-level thought process, pertinence to the entire organization, a form of action, and an end or goal to be attained or achieved. Two other (though less common) themes are strategy that emerges through pattern or process, and the involvement of leaders/top managers.

²¹ Michael E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: Free Press, 2004).

²² Ackoff, *Redesigning the Future*, 523.

²³ Alonzo J. Strickland and Arthur A. Thompson, *Strategic Management: Concepts and Cases*, 7th ed. (New York: McGraw-Hill, 1993), 6.

²⁴ John M. Bryson, *Strategic Planning for Public and Nonprofit Organizations: A Guide to Strengthening and Sustaining Organizational Achievement*, 4th ed. (San Francisco: Jossey-Bass, 2011).

²⁵ Henry Mintzberg, Bruce Ahlstrand, and Joseph Lampel, *Strategy Safari: A Guided Tour through the Wilds of Strategic Management* (New York: Free Press, 1998), 26.

Choosing not to have a deliberate strategy at all is a strategy itself—a choice to discover where the organization will find itself.²⁶ Though having no strategy may be the goal, strategy often emerges from the operations of an organization. The strategy is not explicit or formal, but develops as a result of the processes and decisions that are made. This is also known as strategic effect.²⁷

B. STRATEGY FORMULATION

The literature categorizes strategy formulation in many ways, along one or more continua of process, perspective, participation, time, input, or outcome. Mintzberg, Ahlstrand, and Lampel organize strategy formulation into ten schools of thought in three fundamental types:

- Prescriptive: how strategies are formulated,
- Descriptive: how strategies actually form, and
- Configuration: combines the others into distinct stages or episodes.²⁸

In *The Right to Win*, Cesare Mainardi and Art Kleiner place strategy authors on two continua: who makes strategy decisions (from many to few), and in what time orientation (from future to present).²⁹ The four quadrants created each represent a basic school of thought on the nature of the right to win:

- *Position*: select favorable markets as defined by external forces
- *Concentration*: make the most of current core strengths and businesses
- *Execution*: gain advantage through operational excellence
- *Adaption*: develop overall direction through experimentation and rapid change³⁰

²⁶ Nickols, “Strategy: Definitions and Meaning,” 5.

²⁷ Colin S. Gray, *Modern Strategy* (Oxford: Oxford University Press, 1999), 16.

²⁸ Mintzberg, Ahlstrand, and Lampel, *Strategy Safari*, 17.

²⁹ Cesare Mainardi and Art Kleiner, “The Right to Win,” strategy+business, November 23, 2010, <http://www.strategy-business.com/article/10407?gko=19c25>.

³⁰ Ibid.

Richard Whittington also placed strategy theories along two continua (sometimes referred to as the “two-by-two” model): *outcome* (from profit maximizing to pluralistic—such as social missions); and *process* (from deliberate to emergent).³¹ Again, the four quadrants created each represent a different approach to strategy formulation:

- *Classical*: a top-down, rational, logical approach places profitability as the goal
- *Processual*: strategies emerge through small, incremental steps
- *Evolutionary*: markets driver profitability, stronger performers survive weaker ones become extinct
- *Systemic*: social relations such as family, state, or religion can dramatically impact strategy without regard to their effect on profitability³²

The strategy formulation literature is grouped into the following five categories for this review, by the type and amount of input that produced the strategy:

- *Pre-active*: formal, top-down, rational, deliberate approach with profitability as the goal and focus on analysis: the “strengths and weaknesses of the organization in light of the opportunities and threats in its environment (SWOT).”³³ Strategic planning consultants (usually external) create explicit, formal, structured plans.
- *Active*: develops and forms either through the *perspective* of its creator or through the process by which it *emerged*.
 - *Perspective*: reflective of the person(s) creating it, the culture of the organization, and the influences and biases of each.
 - *Emergent*: small incremental steps constantly seeking to align people and processes for execution and operational excellence.

³¹ Christopher Baird, “Why Is There so Much Disagreement about What Strategy Is?,” Academia.edu, November 2012, 4, https://www.academia.edu/2980379/Why_is_there_so_much_disagreement_about_what_strategy_is.

³² Ibid.

³³ Mintzberg, Ahlstrand, and Lampel, *Strategy Safari*, 24.

- *Reactive*: reaction to the external environment, *passively* through evolution or *actively* through adaption.
 - *Passive*: market drives strategy to best position the organization within it and organizations either evolve or become extinct.³⁴
 - *Active*: organizations must act quickly and creatively in response to events, through experimentation and rapid change, as business faces more volatility, uncertainty, complexity, and ambiguity (VUCA).³⁵
- *Proactive*: flexible strategies to manage uncertainty and promote collaboration, balancing the conflict between the commitment to a strategy that is necessary for positive results and the risk of uncertainty over which strategy to commit to.
- *Hyperactive*: manage a process of periodic disruptive transformation, a quantum leap to another configuration due to an event that fundamentally changes the market or environment in which the organization operates.³⁶

Table 1 shows the main concepts of each category, which authors are its proponents, and how it relates to the aforementioned formulation categories.

³⁴ Ibid., 387.

³⁵ Harry R. Yarger, *Strategic Theory for the 21st Century: The Little Book on Big Strategy* (Carlisle, PA: U.S. Army War College, 2009), 18, <http://www.comw.org/qdr/fulltext/0602yarger.pdf>.

³⁶ Mintzberg, Ahlstrand, and Lampel, *Strategy Safari*, 51.

Table 1. Strategy Formulation Matrix

Name	Concept	Authors	Strategy Safari	Right to Win	Whittington
Pre-active	Formal Top-down Rational Deliberate SWOT analysis Explicit, structured plans	Porter Kiechel Andrews Ansoff Chandler	Prescriptive	Position	Classical
Active	Perspective <ul style="list-style-type: none"> • Of creator • Culture of organization 	Drucker Phahalad Bettis Granovetter Pascale Weick	Prescriptive	Concentration	Systemic
	Emergent <ul style="list-style-type: none"> • Incremental steps • Align people and processes • Execution • Operational excellence 	Mintzberg Cyert/Marsh Hamal Prahalad McMillan Guth Freeman	Descriptive	Execution	Classical
Re-active	Passively <ul style="list-style-type: none"> • Market drives strategy • Org evolves or becomes extinct 	Porter Kim Mauborgne Henderson Williams	Descriptive	Position	Evolutionary
	Actively <ul style="list-style-type: none"> • Experimentation and rapid change • VUCA 	Mintzberg Peters Roberts McGrath Waterman	Descriptive	Adaption	Evolutionary
Proactive	Manage uncertainty <ul style="list-style-type: none"> • Requisite uncertainty 	Raynor	Configuration	Execution	Systemic
	Promote collaboration <ul style="list-style-type: none"> • Collaborative rationality 	Innes Booher Mintzberg Peters Waterman	Configuration	Adaption	Systemic
Hyperactive	Disruptive transformation <ul style="list-style-type: none"> • Challenge status quo • Discovery-based planning 	Christensen	Configuration	Adaption	Processual

It is necessary for leaders, strategists, and planners to understand the different perspectives on how strategies form to know which approach or combination of approaches they are deciding on, allowing them to prepare for any of the issues that type of strategy may bring. It also allows them to understand which strategies may be emerging, which further allows them to keep a watchful eye for issues associated with that form of strategy development.

C. STRATEGIC PLANNING

The word *strategic* is used interchangeably throughout the literature to mean “related to strategy,” in its various forms, or “of great importance,” usually in a broad and long-term sense. Merriam-Webster does the same: “of, relating to, or marked by strategy...of great importance within an integrated whole or to a planned effect.”³⁷ The Oxford Dictionary defines strategic as “relating to the identification of long-term or overall aims and interests and the means of achieving them.”³⁸ The literature is far more ambiguous, however, when combining the term “strategic” with the term “planning.”

Bryson posits that strategic planning “is not a single thing, but instead an approach (or set of approaches) to responding to circumstances that key actors judge require a considered, collective, and often novel response.”³⁹ To understand how the term *strategic planning* is being used, it must be placed within the context of the strategy enterprise in an organization, into or around other perspectives such as the strategic planning process, strategic thinking, strategy formulation, strategic vision, strategic management, and the strategic plan itself.

³⁷ Merriam-Webster, s.v. “Strategic,” accessed September 4, 2016, <http://www.merriam-webster.com/dictionary/strategic>.

³⁸ Oxford Dictionaries, s.v. “Strategic,” accessed September 4, 2016, http://www.oxforddictionaries.com/us/definition/american_english/strategic.

³⁹ B. Guy Peters, *The SAGE Handbook of Public Administration* (Thousand Oaks, CA: SAGE, 2012), 50.

1. Strategic Planning Process

There is little consensus and competing perspectives among strategy authors about the strategic planning process, what it includes, and who performs what role and when. An astounding number of strategic planning processes are described in the literature, with multiple steps in various sequences. Bryson presents perhaps the most popular of these processes as his “strategy change cycle,” which he equates to a strategic planning process with the following steps:

1. Initiate and agree on a strategic planning process
2. Identify organizational mandates
3. Clarify organizational missions and values
4. Assess the external and internal environments
5. Identify the strategic issues facing the organization
6. Formulate strategies to manage the issues
7. Review and adopt the strategies or strategic plan
8. Establish an effective organizational vision
9. Develop an effective implementation process
10. Reassess strategies and the strategic planning process⁴⁰

Bryson strongly cautions that “strategic thinking, acting, and learning are much more important than any particular approach to strategic planning.”⁴¹ Lauren Edwards extrapolates the most often cited components in public sector strategic planning literature, (all of which align somewhat with Bryson’s process):

1. Plan for strategic planning
2. State organizational mission/vision/values
3. Assess external and internal environments (SWOT)
4. [Assess stakeholders]
5. Identify and analyze issues facing the organization
6. State goals of how the organization will face issues
7. Create strategies for reaching goals

⁴⁰ Bryson, *Strategic Planning for Public and Nonprofit Organizations*, 30.

⁴¹ *Ibid.*, 31.

8. Assess feasibility of strategies
9. Create and implement action plans
10. Evaluate, monitor, and update process⁴²

Edwards also creates a “framework of comprehensive strategic planning processes” from studies of organizations that successfully implemented strategic planning; this framework includes the following characteristics:

- General management capacity
- Good leadership
- Broad participation
- Inclusion of essential elements
- Broad dissemination
- Integration with performance management practices, budgeting, and human resource management⁴³

These lists of components, characteristics, and comprehensive processes for strategic planning serve as the basis for the *preferred strategic planning process*, which will be utilized in a comparative framework in Chapter IV. Organizations must understand that these steps represent a generic model of a strategic planning process, and they must decide which steps to take and which not to take, what other steps to take, and in what order to take them, all based on the characteristics of the organization and the environment in which they operate.

2. Strategic Thinking

The central dichotomy in the literature on strategic thinking is whether it is a creative or analytical process. The analytical perspective is that strategic thinking encompasses strategy formulation, strategic planning, and strategy development using analytical tools that create strategies. Heracleous writes: “Porter and others, therefore, use the term ‘strategic thinking’ not as a synthetic and divergent thought process, but as a

⁴² Ibid., 18.

⁴³ Ibid., 20.

convergent and analytical one; in the same way as other authors would use the term strategic planning.”⁴⁴

The creative perspective is that strategic thinking involves synthesis, intuition, and creativity—the act of thinking strategically. Mintzberg describes the outcome of strategic thinking as “an integrated perspective of the enterprise, a not-too-precisely articulated vision of direction,” and not merely “alternative nomenclature for everything falling under the umbrella of strategic management.”⁴⁵ Liedtka, however, explains that both the creative and analytical aspects “are clearly needed in any thoughtful strategy-making process.”⁴⁶ Heracleous bridges the divide by explaining Porter’s focus on positioning the organization and Mintzberg’s focus on how strategies are determined, which “leads these authors to advocate corresponding thinking modes, which in the final analysis are both necessary and complementary.”⁴⁷

3. Strategic Vision

In the context of strategic planning, vision is commonly defined as where you want the organization to be, or the future state of the organization.⁴⁸ A significant amount of literature addresses formulating and disseminating a vision, primarily through a well-crafted vision statement. Visions should be realistic and credible, describing an attractive future for an organization that provides purpose and direction, and should inspire and motivate the members of the organization to attain that vision.⁴⁹ Not all authors agree on specifying a vision; as Satell writes:

⁴⁴ Loizos Heracleous, “Strategic Thinking or Strategic Planning?,” *Long Range Planning* 31, no. 3 (June 1998): 482, doi:10.1016/S0024-6301(98)80015-0.

⁴⁵ Henry Mintzberg, “The Fall and Rise of Strategic Planning,” *Harvard Business Review*, January–February (1994), <https://hbr.org/1994/01/the-fall-and-rise-of-strategic-planning>; Lawrence, *Strategic Thinking: A Discussion Paper*,” 3.

⁴⁶ Jeanne M. Liedtka, “Strategic Thinking: Can it Be Taught?,” *Long Range Planning* 31, no. 1 (February 1998): 121, doi:10.1016/S0024-6301(97)00098-8.

⁴⁷ Heracleous, “Strategic Thinking or Strategic Planning?,” 485.

⁴⁸ Industrial College of the Armed Forces and National Defense University Press, *Strategic Leadership and Decision Making: Preparing Senior Executives for the 21st Century* (Washington, DC: National Defense University Press, 1997), chap. 18, pg. 9, <http://purl.access.gpo.gov/GPO/LPS1059>.

⁴⁹ Ibid., chap. 18, pg. 1.

Sometimes a clear vision can blind management to market realities...and that's the problem with a vision; it's almost impossible to distinguish it from a delusion. Furthermore, it is prone to survival bias-we remember the few that succeed, but the legions of failures are mostly lost to history.⁵⁰

Prominent authors disagree on whether strategic planning creates the vision or is the process of creating a strategy to attain the vision. Mintzberg is a strong proponent of the latter: "Strategic planning, as it has been practiced, has really been strategic programming, the articulation and elaboration of strategies, or visions, that already exist.... Far from providing strategies, planning could not proceed without their prior existence."⁵¹

4. Strategic Management

The literature presents multiple definitions and perspectives on strategic management as well. These range from strategic management as the process of managing the outputs of the strategic planning process (implementation, review, assessment, updates, and associated organizational training and development), to managing the outputs *and* inputs of the process (analysis, synthesis, and strategy formulation). Poister and Streib go even further, writing that strategic management "integrates all other management processes to provide a systematic, coherent, and effective approach to establishing, attaining, monitoring, and updating an agency's strategic objectives."⁵²

5. Strategic Planning Concerns

A well-formulated strategy elucidated in a strategic plan can focus the organization toward a common goal, aligning efforts and optimizing processes. However, strategic planning can be overly focused on the present and the past, and on analysis and extrapolation, locking the organization into cycles of plan, implement, review, and update that may restrict it from looking ahead and preparing for unforeseen opportunities or

⁵⁰ Greg Satell, "The Evolution of Strategy," *Forbes*, September 14, 2013, <http://www.forbes.com/sites/gregsatell/2013/09/14/the-evolution-of-strategy/>.

⁵¹ Mintzberg, "The Fall and Rise of Strategic Planning," 107, 111.

⁵² Theodore H. Poister and Gregory D. Streib, "Strategic Management in the Public Sector: Concepts, Models, and Processes," *Public Productivity & Management Review* 22, no. 3 (1999): 308, doi:10.2307/3380706.

threats. Successful strategies tend to move into the next planning cycle, leading the organization to believe simply following the plan will guarantee success. Lawrence indicates that strategic planning “tends to create the illusion of certainty in a world where certainty is anything but guaranteed.”⁵³ Satell concurs, writing: “As the speed of business continues to accelerate and technology cycles outpace corporate planning cycles, the false certainty that planning engenders is becoming an impediment to, rather than a tool for, attaining objectives.”⁵⁴

Daniel Ebner lists several negative arguments regarding strategic planning, including rigidity that restricts strategic thinking, adaptability, and flexibility.⁵⁵ Formal strategic planning is susceptible to Mintzberg’s three “fallacious assumptions: that prediction is possible; that strategists can be detached from their strategies; and above all, that the strategy making process can be formalized.”⁵⁶ Understanding which strategic planning method to use requires a deep understanding of the organization and the environment in which it operates. Strategies that work well in certain conditions can be extremely harmful in others.⁵⁷

6. Mitigating Strategic Planning Concerns

To encourage strategic thinking, organizations can utilize structured planning tools such as *scenario planning* (originated and championed at Royal Dutch/Shell). Multiple potential futures are explored, with players working through what would need to happen to survive or excel in those environments. As Heracleous indicates, this forces managers to question their guiding assumptions “and sensitize their thinking to potential competitive arenas substantially different from current ones.”⁵⁸

⁵³ Lawrence, *Strategic Thinking: A Discussion Paper*, 10.

⁵⁴ Satell, “Evolution of Strategy,” 2.

⁵⁵ Daniel Ebner, *Formal and Informal Strategic Planning: The Interdependency between Organization, Performance and Strategic Planning* (Berlin: Springer Science & Business Media, 2013), 56.

⁵⁶ Mintzberg, “The Fall and Rise of Strategic Planning,” 110.

⁵⁷ Henry Mintzberg, “Patterns in Strategy Formation,” *Management Science* 24, no. 9 (May 1978): 948.

⁵⁸ Heracleous, “Strategic Thinking or Strategic Planning?,” 481.

To ensure an organization is not blindly committing to a successful strategy without looking ahead (or around) for opportunities or threats, Raynor believes upper management should build *strategic options* for the organization, rather than make strategic choices; lower management should have the flexibility to decide which option to commit to. He calls this principle *Requisite Uncertainty* because each level of the hierarchy is defined by its relationship to managing strategic uncertainty.”⁵⁹ Innes and Booher posit the theory of *collaborative rationality* to manage uncertainty, replacing linear process and formal expertise with a “non-linear, socially constructed processes engaging both experts and stakeholders.”⁶⁰

To protect an organization from succumbing to unexpected disruptive innovation, Christensen recommends discovery-based planning, in which managers assume forecasts and the strategies chosen may be wrong. This “drives managers to develop plans for learning what needs to be known, a much more effective way to confront disruptive technologies successfully.”⁶¹ Organizations must be prepared for the transformative nature of disruptive innovation; as Christensen warns, “The very processes and values that constitute an organization’s capabilities in one context, define its *disabilities* in another context.”⁶²

Though the lack of flexibility remains a common concern about strategic planning, Boyd and Reuning-Elliott found “a positive relationship between the orientation toward change (as measured by the Miles and Snow continuum) and strategic planning.”⁶³ Strategic planning can include a framework for adaption and flexibility to

⁵⁹ Michael E. Raynor, *The Strategy Paradox: Why Committing to Success Leads to Failure (and What to Do about it)*, 1st ed. (New York: Crown Business, 2007), 254.

⁶⁰ Judith Eleanor Innes and David E. Booher, *Planning with Complexity* (London: Routledge, 2010), 5.

⁶¹ Clayton M. Christensen, *The Innovator’s Dilemma: When New Technologies Cause Great Firms to Fail* (Boston: Harvard Business School Press, 1997), 325.

⁶² Ibid., 331.

⁶³ Brian K. Boyd and Elke Reuning-Elliott, “A Measurement Model of Strategic Planning,” *Strategic Management Journal* 19, no. 2 (February 1998): 186.

help an organization work its way through a significant change in structure, orientation, or environment.⁶⁴

7. Strategic Planning in the Public Sector

Strategic planning models proliferate in business but are difficult to adapt to the public sector.⁶⁵ Stakeholders in private organizations are usually aligned with profitability, while “public sector organizations have multiple goals and multiple stakeholders that pull the organization in different directions.”⁶⁶ William Eldridge identifies seven categories of cultural distinction between public and private organizations that require different approaches to strategic planning due to different expectations for their success:

- Governments have less competition than businesses.
- Customer influence is likely to be weaker in government.
- Measuring governmental work performance is more difficult.
- Rapid turnover of governmental leaders causes instabilities that inhibit the developing and sustaining of a long-term strategic direction for the organization.
- Governments have more stakeholders and are subject to greater outside influence than are private companies.⁶⁷

Public organizations have more difficulty determining external metrics for success than the private sector, as they often do not have to compete for customers. Political and social needs, not customers or markets, typically determine funding in public organizations. The FDNY receives funding this way, but incorporating emergency medical services (EMS) and tightening of government budgets has forced it to account

⁶⁴ Carola Wolf and Steven W. Floyd, “Strategic Planning Research Toward a Theory-Driven Agenda,” *Journal of Management*, March 26, 2013, 15, doi:10.1177/0149206313478185.

⁶⁵ Edwards, “Strategic Planning in Local Government,” 15.

⁶⁶ Lester Young, Thomas E. Reynolds, and Thomas Lee Harris II, “Organizational Strategic Planning and Execution: Should Governmental Organizations Rely on Strategic Planning for the Success of the Organization?” (joint applied project, Naval Postgraduate School, 2007), 87, <http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA470072>.

⁶⁷ William H. Eldridge, “Why Angels Fear to Tread: A Practitioner’s Observations and Solutions on Introducing Strategic Management to a Government Culture,” in Jack Rabin and Gerald J. Miller (eds.), *Handbook of Strategic Management*, 2nd ed., 319–336 (Boca Raton, FL: CRC Press, 2000).

for revenue generation more significantly than in the past. The private sector has always used profitability as its metric of success, and has numerous ways to determine it.

A compelling perspective on public performance metrics is Mark Moore's concept of *public value*, equating it to shareholder value in the private sector. While public sector managers are traditionally focused on implementation, Moore envisions a "strategic triangle for the public sector" that encourages them to "look for opportunities to use their organization to create public value"; the triangle

- defines the organization's mission in terms of important public values,
- describes the sources of support and legitimacy that the organization can draw on to accomplish its mission, and
- explains what activities the organization uses to achieve its mission.⁶⁸

Bryson expands: "creating public value means producing enterprises, policies, programs, projects, services, or infrastructures (physical, technological, social, etc.) that advances the public interest and the common good at a reasonable cost."⁶⁹ Public sector strategies can align more closely with private sector strategies and their outcomes by substituting public value for profit.

A large number of studies focus on the impact of strategic planning on organizational performance, but few involve the public sector. As Lauren Edwards notes: "Many of these studies suggest that strategic planning has a positive impact on firm financial performance. However, to date, only a handful of studies have tested the impact of strategic planning on performance in the public sector."⁷⁰ Young, Reynolds, and Harris examined twenty-four federal agencies with improved performance after successfully adopting strategic planning. After studying six of these with different missions, the authors "found conclusive evidence that strategic planning did significantly

⁶⁸ Steven Cohen, William Eimicke, and Tanya Heikkila, *The Effective Public Manager: Achieving Success in a Changing Government*, 4th ed. (San Francisco: Jossey-Bass, 2008), 255.

⁶⁹ Bryson, *Strategic Planning for Public and Nonprofit Organizations*, 8.

⁷⁰ Edwards, "Strategic Planning in Local Government," 43.

improve the effectiveness of these six organizations and should be routinely applied as a fundamental doctrine of normal operations.”⁷¹

D. CHAPTER CONCLUSIONS

Literature on strategy and strategic planning suffer the same affliction: correlation does not equal causation and the extensive data supporting conclusions are replete with survivor bias. A number of authors and studies make compelling arguments that strategic planning both improves and hurts organizational performance. More research is needed to unravel the complexities of this argument, especially in the context of the public sector.

The strategic planning community continues to progress through a cycle: embrace the latest fad, discover its problems, then move onto the next fad, which supposedly has addressed the old fad’s failures. New processes emerge that are often an amalgam of old ones, cherry-picking positive concepts and introducing new ones designed to eliminate what went wrong or was missing. After several decades of these cycles, the theories have evolved to the point where solutions have been posited for most of the identified issues surrounding strategic planning. Recurring themes in the literature that correlate to organizational success include

- culture that encourages learning at every level of the organization;
- room for innovation at any level of the organization;
- iterative process of feedback in a constant cycle of improvement;
- direct connection between the front line and strategic planners;
- strategy formulators with a deep understanding of the organization’s history, capabilities, resources, environment, and culture; broad and diverse vertical and horizontal input from all internal domains;
- divergent and emergent input from inside and outside the organization;
- collaboration between disparate groups inside and outside the organization; and
- performance measurement of outcomes in addition to outputs.

⁷¹ Young, Reynolds, and Harris, “Organizational Strategic Planning and Execution,” 83.

Ultimately, organizations like the FDNY must know the spectrum of strategy formulation processes and perspectives. They must match them to a deep understanding of their internal and external environments to determine which process or combination of processes to employ for that organization, in that environment, at that time.⁷²

⁷² Wolf and Floyd, "Strategic Planning Research," 18.

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III. REVIEW OF THE FDNY STRATEGIC PLANNING PROCESS

This chapter presents an in-depth review of the FDNY's development and implementation of a strategic planning process after 9/11, and its continuous use since. The goal of this review is to assess existing post-9/11 processes and policies relative to strategic planning at the FDNY while considering the potential for modified or new processes. The review begins with McKinsey & Company's 2002 analysis and final report, titled *Increasing the FDNY's Preparedness*. It continues with the formulation of the FDNY's first strategic plan in 2004 and a combined review of the subsequent four FDNY strategic plans, released in 2007, 2009, 2011, and 2015. It also looks at several bureau or command plans and two department-wide but conceptually specific strategies. The review continues with the Boston Consulting Group's 2012 analysis and final report, titled *Project Axiom*, and concludes with a list of the components of the FDNY strategic planning process, as discovered through the review.

After the unimaginable tragedy of 9/11, the FDNY began a top-to-bottom assessment of the entire Department's response and what it revealed about its ability to respond to all-hazard events. The City of New York and the FDNY commissioned world-renowned consultants from McKinsey & Company to conduct a study of the Department's response on 9/11 and make recommendations to improve preparedness in the future.⁷³ One resulting recommendation was to enhance planning and management processes by creating "a formal Annual Plan, consisting of clear objectives, along with initiatives designed to meet those objectives."⁷⁴ The FDNY embraced and expanded on this recommendation, producing five strategic plans to date, in addition to several bureau plans and department-wide concept strategies.

⁷³ Daniel Shacknai and Meta Ribowsky, "History of Strategic Planning at FDNY," *WNYF*, 2011, 14.

⁷⁴ McKinsey & Company, *Increasing the FDNY's Preparedness*, 77.

A. MCKINSEY & COMPANY

McKinsey & Company spent five months with the FDNY conducting an exhaustive review of its response to the terrorist attack on 9/11. They focused on identifying policies and procedures, organizational constructs, and improvements in technology that would increase the Department's preparedness. McKinsey & Company interviewed over a hundred FDNY personnel who responded to the attack and "examined transcripts of hundreds more the Department conducted internally."⁷⁵

The McKinsey team was given unrestricted access to all FDNY records and personnel, including all senior staff members. They reviewed dispatch records and many hours of communication tapes. The team "also spoke with more than 100 experts in the United States and abroad, including those in other fire departments, emergency agencies, and the military, as well as researchers, and technology vendors."⁷⁶ They created multiple work groups that included about fifty fire and EMS members, who worked with them to develop recommendations during more than half of the study.⁷⁷

The final report was released in August 2002 and included an extensive analysis of the FDNY's response on 9/11. The report presented fifteen short- and long-term recommendations grouped into four key areas: *operations*, *planning and management*, *communications and technology*, and *family and member support services*.⁷⁸ The FDNY embraced the recommendations, some of which they implemented before the final McKinsey report was released. Just nineteen months later, when the FDNY released the first of its own strategic plans, all of the McKinsey recommendations in the areas of *planning and management* and *family and member support services* had been completed, and many of the *Operations* recommendations were in later stages of implementation (see Appendix C for more details).

⁷⁵ Ibid., 3.

⁷⁶ Ibid., 4.

⁷⁷ Ibid.

⁷⁸ Ibid., 23.

B. FROM MCKINSEY TO FDNY STRATEGIC PLANNING

In response to the McKinsey recommendation to enhance its planning and management capabilities, the FDNY created a strategic planning process involving bureau heads, staff chiefs, and managers at the highest levels of the bureaus and units throughout the Department. They created a Planning Oversight Committee (POC), led by the fire commissioner and the chief of department that oversaw the work of a Planning Work Group (PWG) to collate the bureaus' short- and long-term goals.⁷⁹

The chief of planning and strategy and the deputy commissioner for intergovernmental affairs and management initiatives co-chaired the PWG. It also included two fire deputy assistant chiefs (borough commanders), the EMS deputy assistant chief of planning and strategy, the associate commissioner for management initiatives, the director of management analysis and planning, and the director of strategic planning. The POC and the PWG prioritized the goals and synthesized them into improvements for everyday response as well as punctuated large-scale events. They developed an accountability plan by establishing reporting requirements to monitor milestones, evaluate performance, and ensure successful completion of the plan's objectives.⁸⁰

The PWG also took on what turned out to be a much more difficult challenge: developing a mission statement that reflected the Department's changing responsibilities; and identifying the FDNY's core values that would respect the Department's history while framing its future in a new and uncertain environment. After engaging in "spirited discussions over the course of many months," the PWG agreed on six core values—service, bravery, safety, honor, dedication, and preparedness—and a more comprehensive agency mission statement that better reflected the Department's expanded responsibilities in a post-9/11 world:

As first responders to fires, public safety and medical emergencies, disasters and terrorist acts, FDNY protects the lives and property of New York City residents and visitors. The Department advances public safety

⁷⁹ Shacknai and Ribowsky, "History of Strategic Planning at FDNY," 14.

⁸⁰ Ibid.

through its fire prevention, investigation, and education programs. The timely delivery of these services enables the FDNY to make significant contributions to the safety of New York City and homeland security efforts.⁸¹

This effort culminated in the first FDNY Strategic Plan, released on March 29, 2004.

C. FDNY STRATEGIC PLAN 2004–2005

The POC identified six priority goals and an ambitious list of twenty primary and fifteen secondary objectives representing 100 initiatives.⁸² Three of the priority goals reflect the McKinsey report's recommendations: *improve emergency response operations, strengthen management and organizational development, and advance technology*.⁸³

The remaining McKinsey report recommendation, *enhance the system to provide support services to families and members*—which was partially implemented with the establishment of the Family Assistance Unit (FAU) and the Family Information Call Center (FICC)—was listed as an objective under *strengthen management and organizational development*.⁸⁴

Three goals were added to the McKinsey recommendations:

- *Enhance health and safety of FDNY members.* Already a core FDNY value, 9/11 exponentially increased the number of members with physical and mental health problems. It also highlighted the need for greatly expanded chemical, biological, radiological, nuclear, and explosive protection for its members.⁸⁵
- *Increase diversity.* A growing focus for the Department elevated by federal Equal Employment Opportunity Commission (EEOC) complaints filed by the Center for Constitutional Rights (CCR) in 2004.
- *Improve fire prevention and fire safety education.* The events of 9/11 highlighted the need for new safety requirements and evacuation plan

⁸¹ Ibid.

⁸² Ibid.

⁸³ “FDNY Strategic Plan: 2004–2005,” FDNY, accessed September 21, 2016, ii, http://www.nyc.gov/html/fdny/pdf/pr/2004/strategic_plan/strategic_plan_whole.pdf/.

⁸⁴ Ibid., iv.

⁸⁵ Ibid., 17.

procedures for commercial high-rise buildings.⁸⁶ Educating at-risk communities was already a vital component of the FDNY, and the Department wanted to increase focus in this area.⁸⁷

Though two of the three goals were prioritized as a result of 9/11, all reflect a broader and more pro-active perspective than the McKinsey report, focusing on prevention as opposed to response. Under each objective were four sections:

- Background: the context and critical need the objective seeks to address
- Accomplishments: the work already completed to meet each objective
- Next Steps and Timeframe: the specific work required during the next two years to complete the objective
- Lead Bureau: the Department bureau responsible for each objective⁸⁸

In June 2005 the FDNY released the “Strategic Plan 2004–2005 First Year Scorecard,” which extolled their accomplishments and included a report-card style checklist for all primary and secondary objectives with a summary of their completion percentage (see Table 2).⁸⁹

Table 2. Strategic Plan 2004–2005 First Year Scorecard⁹⁰

% Objective Completion	Primary Objectives	Secondary Objectives
Completed	43%	22%
50-99% completed	29%	47%
<50% completed	28%	31%

⁸⁶ Ibid., 29.

⁸⁷ Ibid., 30.

⁸⁸ Ibid., 6.

⁸⁹ “FDNY Strategic Plan 2004–2005: First Year Scorecard,” FDNY, June 2005, 1, http://www.nyc.gov/html/fdny/pdf/pr/2005/strategic_plan/first_year_scorecard.pdf.

⁹⁰ Ibid.

The *Final Scorecard* for the 2004–2005 strategic plan was published as Appendix B of the 2007–2008 strategic plan (see Table 3).⁹¹

Table 3. Strategic Plan 2004–2005 Final Scorecard⁹²

% Objective Completion	Primary Objectives	Secondary Objectives
Completed	93%	78%
Nearing completion	7%	22%

This was an unusually transparent approach for a public service agency, reflecting the FDNY’s commitment to strategic planning and institutional change.

D. FDNY STRATEGIC PLANS TWO THROUGH FIVE

The FDNY has produced four additional strategic plans to date since their first. All FDNY strategic plans essentially retained the main goals established in the first one with the exception of *advance technology*, which was incorporated into the technology components of each of the five remaining main goals. The FDNY revised the five principal goals for the 2015–2017 plan, reflecting the mayoral and agency administration change:

- Safety: The Public, Firefighters and EMTs and Paramedics
- Integrating Fire and EMS to Enhance the FDNY’s Ability to Deliver Emergency Medical Service
- Diversity and Inclusion
- Improving Service Delivery
- Community Engagement⁹³

The second goal, *Integrating Fire and Emergency Medical Service*—which was included in several previous plans—now became a distinct goal, replacing *strengthen*

⁹¹ “FDNY Strategic Plan: 2007–2008,” FDNY, accessed September 21, 2016, 55, http://www.nyc.gov/html/fdny/pdf/strat_plan/2007/strategic_plan_whole.pdf.

⁹² Ibid.

⁹³ “FDNY Strategic Plan: 2015–2017,” FDNY, accessed September 21, 2016, 1, http://www.nyc.gov/html/fdny/pdf/ofc/FDNY_strategic_plan_2015_2017.pdf.

management and organizational development.⁹⁴ The other four goals roughly reflect those in previous plans. The 2015–2017 strategic plan is little changed from the other FDNY strategic plans, save a highlighted focus on integration, and inclusion.

The number of primary objectives listed in the FDNY strategic plans ranged from fourteen to twenty four, and secondary objectives did not appear after the first plan. The first two plans included specific timeframes for attaining many of the tasks associated with the objectives, while successive ones did not. The 2015–2017 plan separated the objectives into short-term, intermediate, and long-term, adding a temporal context but not specifically in terms of attainment expectation.

The first two FDNY strategic plans included an executive summary and summary charts of goals and objectives, and expressed objectives in the Background, Accomplishments, Next Steps and Timeframes, and Lead Bureau format. By the 2009–2011 plan, the FDNY eliminated the executive summary and summary charts of goals and objectives; the “Background, Accomplishments, Next Steps and Timeframes, and Lead Bureau” framework; and the scorecard (though score-carding continued internally).

Participation in the POC, later renamed Accountability Group (AG), and the PWG had several iterations over the course of the plans. The POC/AG expanded from two to eight members in the 2009–2010 and 2011–2013 plans, representing much broader inclusion of hierarchical levels. The PWG contracted from ten to five members for these plans, partly a result of previous PWG participants’ promotion to positions now included in the AG. However, combined with the expanded AG, this still represented much broader inclusion in the decision-making process.⁹⁵ See Appendix B for further details.

The PWG established “reporting requirements to monitor milestones, evaluate performance, and ensure successful completion of the plan’s objectives.”⁹⁶ The process

⁹⁴ Ibid.

⁹⁵ Meta Ribowsky (FDNY Strategic Planning Unit director), in discussion with author, 2016.

⁹⁶ Shacknai and Ribowsky, “History of Strategic Planning at FDNY,” 14.

included quarterly reports submitted by each bureau head and/or project leader or manager for inclusion in a priority projects report managed by the strategic planning director. Additionally, bureau heads were tasked with presenting initiatives of high importance to the AG at quarterly Commissioner’s Priority Projects Meetings.⁹⁷

E. FDNY BUREAU AND COMMAND STRATEGIC PLANS

Other than one initiative in the 2011–2013 plan, “develop a five-year strategic plan for the Bureau of Communications” (which has not been completed to date), the FDNY does not require bureau- or command-specific strategic plans.⁹⁸ However, several strategies and strategic plans emerged as a result of the influence of the strategic planning process (and the influence of some of the process participants): The Manhattan and Bronx Borough Commands produced strategic plans; the Special Operations Command (SOC) produced the Marine Operations Strategy and Rescue Operations Strategic Plan; the Safety and Inspection Services Command produced several risk management plans; and other bureaus started strategic plans but either never completed them, or completed them but without subsequent adoption by the Department.

The Center for Terrorism and Disaster Preparedness (CTDP) produced two Department-wide strategies, the *Terrorism and Disaster Preparedness Strategy* and the *FDNY Counterterrorism and Risk Management Strategy*. These detail how the Department meets its evolving responsibilities in the homeland security network. CTDP indicates: “The Strategy’s end product is not simply an articulation of where the Department wants to be, but rather a road map describing how to get there.”⁹⁹ These two strategies presented a broad but coordinated effort to place the FDNY as the emergency response agency at the forefront of each of these categories locally, nationally, and internationally.

⁹⁷ Meta Ribowsky (FDNY Strategic Planning Unit director), in discussion with author, 2016.

⁹⁸ “FDNY Strategic Plan: 2011–2013,” FDNY, accessed September 21, 2106, 5, http://www.nyc.gov/html/fdny/pdf/publications/FDNY_strategic_plan_2011_2013.pdf.

⁹⁹ CTDP, *Terrorism and Disaster Preparedness Strategy*, 7.

F. BOSTON CONSULTING GROUP (BCG) PROJECT AXIOM

During the implementation of the 2011–2013 plan, several FDNY leaders concluded that the strategic planning process—begun as a result of the McKinsey report—had run its course. Almost 80% of the objectives delineated in the McKinsey report and the first three FDNY strategic plans had been attained (see Appendix C for more information). The five goals common to all of the strategic plans would always be part of the FDNY. They felt it was time to move the planning horizon further out, to look more strategically at what the Department needed to do to prepare for the future.

Toward that end, the FDNY turned to the Boston Consulting Group (BCG), a world-renowned consulting firm (BCG, McKinsey & Company, and Bain & Company are collectively known as the “Big Three”).¹⁰⁰ Using existing relationships and leveraging their history and reputation, the FDNY was able to commission BCG to prepare an analysis and develop a long-term strategy on a pro-bono basis. This report, titled *Project Axiom*, was a significant departure from the FDNY strategic plans and the McKinsey report; it focused on a much longer time horizon (2030) and took a business/market approach to analyze the potential future needs of New York City and what role the FDNY could play in meeting those needs.

For three months in 2012, a team of seven BCG consultants worked with the FDNY to develop a 10+-year strategy. The company interviewed over fifty FDNY personnel (fire, EMS, and civilians) and conducted market research in order to:

- Understand the “market” for life safety needs in NYC, how those needs were changing, and how the Department should adapt (if at all) to those changes.
- Understand the historic and future trends of the life-safety needs of NYC to predict if and how the FDNY might need to change to meet new demands.
- Brainstorm together the vision for the FDNY, guiding principles for any change, and the actions the FDNY can take to achieve the vision.¹⁰¹

¹⁰⁰ “To the Brainy, the Spoils; Management Consulting,” *Economist*, May 11, 2013, 67–68.

¹⁰¹ Boston Consulting Group, *Project Axiom* (Boston: BCG, 2012), FDNY Table of Contents and Intro.

The FDNY team included the fire commissioner, the first deputy commissioner, the chief medical officer, the chief of department, the chief of operations, the chief of EMS, and the chief of counterterrorism and emergency preparedness. Project Axiom determined that 3% of current FDNY incidents (2011) were related to fire, 15% to other life safety, and 82% to medical reasons. It also noted current staffing (2011) was 10,800 uniformed fire personnel and 3,200 EMS personnel.¹⁰² Based on their analysis of ten-year data trending, they projected in 2030 only 2% of FDNY incidents would be related to fire, 11% to other life safety, and 87% to medical reasons.¹⁰³

The BCG team determined and analyzed the drivers of fire, medical, and other life-safety incident rates and provided empirical data to support the rationales for each, as shown in Table 4.

Table 4. Incident Rate Drivers

Fire	Medical	Other Life Safety
<ul style="list-style-type: none"> • Population growth • Property crime • Vacancy rates • Smoking rates 	<ul style="list-style-type: none"> • Population growth • General health • Access to care • Environment 	<ul style="list-style-type: none"> • Population growth • Aging infrastructure • Historical trends in alarms and inspections¹⁰⁴

They also acknowledged potential disruptions (such as healthcare policy reform, worsening economic conditions, and worsening climate change), and calculated both low- and high-demand forecasts on either side of their baseline projection.¹⁰⁵ BCG addressed surge capacity to large-scale disasters with a resource utilization analysis of response in four groupings of escalating potential disaster events.

¹⁰² Ibid., 10, SC1.

¹⁰³ Ibid., 11, SC1 Appendix.

¹⁰⁴ Ibid., 14, SC1 Appendix.

¹⁰⁵ Ibid., 12, SC1 Appendix.

Project Axiom concluded that FDNY would have to shrink its workforce significantly or adapt the force to meet new needs.¹⁰⁶ In presenting this conclusion, BCG was mindful to consistently frame its analysis and recommendations within the context of the FDNY's day-to-day mission resources while maintaining the ability to surge to large-scale incidents.¹⁰⁷ This was an important distinction, as the FDNY is a proud 150-year-old institution steeped in tradition, and is historically extremely resistant to change.

BCG grouped the recommendations into three categories: training/staffing model, deployment model, and service model.¹⁰⁸ It provided benchmarks from other cities using those models, and an economic analysis of the current and projected demand environment for each.¹⁰⁹ These initiatives did not commit to specific ends, but would put the Department on a path toward achieving them with flexibility to adapt to changes in the environment along the way.

To address the change environment necessary to implement these recommendations, an experienced BCG global topic specialist facilitated a creative exercise with the team using BCG's "Thinking in New Boxes" approach to ideation and long-term scenario planning.¹¹⁰ The team explored alignment on the need for change, top ideas on what specifically needs to change, barriers to change, and potential workarounds for the barriers.¹¹¹ BCG distilled these ideas into eleven initiatives grouped into three categories: operational game changers, communications and community, and policy reform.¹¹²

The Project Axiom report included "prep packs" for each initiative that detailed current thinking and were designed to restart the conversation (regardless of when), outline immediate next steps (six months to five+ years), and identify potential risks and

¹⁰⁶ Ibid., 9, SC2 Workshop.

¹⁰⁷ Ibid., 21, SC2.

¹⁰⁸ Ibid., 61, SC1 Appendix.

¹⁰⁹ Ibid., 63–72, SC1 Appendix.

¹¹⁰ Ibid., 4, SC2 Workshop.

¹¹¹ Ibid., 11, SC2 Workshop.

¹¹² Ibid., 11, SC3, Workshop.

ways to mitigate them in order to finalize each initiative.¹¹³ This provided the FDNY with a cohesive plan that had actionable components, which could be initiated at any time, catalyzed by the work BCG provided in the form of the prep packs. BCG focused on the FDNY shaping its future, instead of having it defined for it by the changing environment.

G. FDNY STRATEGIC PLANNING PROCESS (FD-SPP) ELEMENTS

Based on the review detailed in this chapter, the following FDNY strategic planning process (FD-SPP) is delineated, as it is not documented formally in a policy or procedure.

Components of the FD-SPP

- Create a Planning Oversight Committee (POC)
- Designate a Planning Work Group (PWG)
- Develop/revise mission statement
- Identify core values
- Survey bureaus to identify short- and long-term goals and objectives
- Prioritize initiatives to improve both daily and catastrophic response
- Identify goals from prioritized initiatives for the next two years and beyond
- Develop a list of critical initiatives necessary to achieve each goal
- Elucidate the prioritized goals and initiatives necessary to achieve them in the form of a strategic plan
- Develop reporting requirements to monitor milestones
- Monitor progress of critical objectives against milestones
 - Conduct a detailed assessment of long- and short-term goals and objectives every two years
 - Publish in a new strategic plan

¹¹³ Ibid., 2, Initiative Prep Packs.

H. BCG PROJECT AXIOM PLANNING PROCESS (BCG-PP) ELEMENTS

Based on the review of the Project Axiom report, the following BCG Project Axiom planning process (BCG-PP) is delineated:

Components of the BCG-PP

- Create a steering committee and working team
- Formulate a project timeline
- Conduct internal and external analysis
- Utilize FDNY mission statement
- Utilize FDNY core values
- Develop strategic options
- Conduct demand landscape analysis
 - Surge needs
 - Life safety changes
 - Economics
 - Benchmarks of other models
- Conduct “Thinking in New Boxes” creative workshops
- Check alignment of ideas
- Barriers to change
- Align on vision and principles for change
- Conduct internal and external stakeholder analysis
- Create action plan (1–18 months; 18 months–5 years; 5 years+)
- Prepare “initiative action (prep) packs”

I. CHAPTER CONCLUSION

This chapter provided an in-depth review of the formulation and application of a strategic planning process at the FDNY. The process grew out of the McKinsey report prepared for the FDNY just after 9/11 and was used to create five strategic plans to date. The chapter includes a review of BCG's Project Axiom, another report prepared for the FDNY by an outside consulting organization. Additionally, this chapter reviewed the second-order impact of the FDNY strategic planning process, notably several bureau or command strategic plans. It concludes with a description of the strategic planning process at the FDNY. Chapter IV compares that process to a baseline process culled from the literature, and to the BCG process used to create the Project Axiom report.

IV. ANALYSIS OF THE FDNY STRATEGIC PLANNING PROCESS

Chapter III reviewed the FDNY strategic planning process since September 11, 2001, and this chapter analyzes that process. The chapter begins by formulating a baseline strategic planning process and the weighting of its elements: components and characteristics. It then describes the comparative analysis and compares the FDNY process to the baseline process; the BCG Project Axiom process to the baseline process; and the FDNY process to the BCG Project Axiom process. The chapter concludes with results categorized for interpretation in Chapter V.

Note: Due to the variability in the nomenclature of strategy, strategic planning, and related terms, Appendix D contains a list of frequently used terms and their definitions that will be used for the remainder of this thesis for clarity and brevity.

A. PREFERRED STRATEGIC PLANNING PROCESS (PSPP)

The literature review produced a list of desirable strategic planning process elements. Primary sources included scholarly writings, peer-reviewed studies, work by cited and prominent authors, and many articles/writings about strategic planning in public organizations. The following methodology determined the selection and weighting of elements for the analysis.

1. Inclusion Methodology

Sources for the analysis included two peer-reviewed studies, John Bryson's *Strategic Planning for Public and Nonprofit Organizations*, and five of the articles/writings. The two studies used the impact of strategic planning on public sector organizational performance as their research topic, with outputs of preferred elements. Bryson's book is the preeminent tome in this domain. Five of the articles/writings presented practical and usable preferred elements.

A matrix compared the list of desired elements to the sources. Less than four data points of connection eliminated the element. The remaining 30 elements (23 components

and 7 characteristics) are the *preferred strategic planning process* (PSPP). These are listed in Table 5 and are grouped into six functional categories: pre-formulation, formulation, planning, implementation, management, and characteristics.

Table 5. Elements of the PSPP

Grouping	Elements (Components/Characteristics)
Pre-formulation	<ul style="list-style-type: none"> • Create and Agree on Process • Create Vision Statement • Review/Revise/Create Mission Statement • Identify Organizational Values
Formulation	<ul style="list-style-type: none"> • Internal Analysis • External Analysis • Internal Stakeholder Analysis • External Stakeholder Analysis • Formulate Overall Strategy • Formulate Goals
Planning	<ul style="list-style-type: none"> • Generate Strategic Plan • Develop Objectives • Develop Action Plan • Develop Implementation Plan
Implementation	<ul style="list-style-type: none"> • Include Feedback Loop • Implement Action Plan • Implementation Plan
Management	<ul style="list-style-type: none"> • Targets (milestones) • Responsibility • Evaluate Goal/Objective Attainment • Evaluate Outcomes • Evaluate Benchmarks • Evaluate and Report Externally
Characteristics	<ul style="list-style-type: none"> • Leadership Support/Involvement • Future Orientation • Broad Perspective • Inclusion of Leaders • Inclusion of Managers • Inclusion of Lower-Level Staff • Inclusion of External Stakeholders

2. Weighting Methodology

Scoring of preferred elements used a 0–5 scale, study elements based on the analysis provided in the study, Bryson’s ten elements (steps) based on their importance in

the text, and the number of the articles/writings that applied a preferred element. An average of the scores, expressed as a percentage of the total, yielded the weighted score for each element, as shown in Tables 6 and 7.

Table 6. PSPP Weighting Matrix

Process Elements	E	Y	B	BR	PS	TCC	N	SM	#Y	Tot	Wt
Pre-formulation											
Create and Agree on Process	4	4	5			Y			1	14	0.035
Create Vision Statement	2	4	5			Y	Y		2	13	0.033
Review/Revise/Create Mission Statement	4	5	5	Y	Y	Y	Y		4	18	0.045
Identify Organizational Values	*	*	3		Y	Y	Y		3	6	0.030
Formulation											
Internal Analysis	4	5	5			Y			1	15	0.038
External Analysis	3	5	5	Y	Y	Y			3	16	0.040
Internal Stakeholder Analysis	*	3	4		Y				1	8	0.027
External Stakeholder Analysis	*	4	5		Y			Y	2	11	0.037
Formulate Overall Strategy	*	4	5		Y	Y	Y		3	12	0.040
Formulate Goals	5	5	4	Y		Y	Y		3	17	0.043
Planning											
Generate Strategic Plan	4	3	4		Y			Y	2	13	0.033
Develop Objectives	5	3	5	Y		Y	Y		3	16	0.040
Develop Action Plan	3	3	5	Y	Y	Y			3	14	0.035
Develop Implementation Plan	*	3	4			Y		Y	2	9	0.030
Implementation											
Include Feedback Loop	*	5	4			Y	Y	Y	3	12	0.040
Implement Action Plan	3	*	5	Y		Y			2	10	0.033
Implementation Plan	*	3	4	Y		Y		Y	3	10	0.033
Management											
Targets (milestones)	*	4	3				Y	Y	2	9	0.030
Responsibility	*	4	4			Y	Y		2	10	0.033
Evaluate Goal/Object Attain	3	*	3			Y	Y	Y	3	9	0.030
Evaluate Outcomes	3	5	4			Y			1	13	0.033
Evaluate Benchmarks	1	*	4			Y	Y	Y	3	8	0.027
Evaluate and Report Externally	1	4	5					Y	1	11	0.028
Characteristics											
Leadership Support/Involvement	1	5	5		Y	Y			2	13	0.033
Future Orientation	*	*	2		Y	Y	Y		3	5	0.025
Broad Perspective	*	3	3				Y	Y	2	8	0.027
Inclusion of Leaders	3	4	4		Y	Y		Y	3	14	0.035
Inclusion of Managers	4	4	3			Y		Y	2	13	0.033
Inclusion of Lower-Level Staff	3	3	1			Y			1	8	0.020
Inclusion of External Stakeholders	2	5	5		Y	Y		Y	3	15	0.038

Component and characteristic scores were divided by three if not included in one of the studies, and by two if not included in both of the studies. See Appendix E for source information.

Table 7. PSPP Weighting Matrix Legend

Code	Refers to	Code	Refers to	Score	Weighting
E	Edwards	N	Noble	0	Not mentioned
Y	Young et al	SM	Steurer & Martinuzzi	1	Not important
B	Bryson	#Y	# Yes to included in paper	2	Of little importance
BR	Boyd & Reuning-Elliott	Tot	Total of E+Y+B+#Y	3	Moderately important
PS	Poister & Streib	Wt	Weighted (Tot/#E, Y, B, #Y)	4	Important
TCC	TCC Group	*	Not included in calculation	5	Very important

B. STRATEGIC PLANNING PROCESS COMPARISON

The review in Chapter III summarized the *FDNY strategic planning process* (FD-SPP) and the *BCG Project Axiom planning process* (BCG-PP). A matrix compared each to the PSPP, and to each other. Primary analysis compared the FD-SPP and PSPP. Secondary analysis compared the BCG-PP and PSPP, and the parts of the FD-SPP and BCG-PP processes that aligned with each other. The outcome of the comparative analysis yields results in two areas: how well the FD-SPP compared to the PSPP, and the contrast between the FD-SPP and BCG-PP when compared to the PSPP. Output of each is a list of weighted elements and their degree of variance, either from the preferred process or from each other.

1. Primary Comparative Analysis

The analysis used a qualitative approach, as the FDNY has no documented formal strategic planning process policy in place. Historical review; process output (the strategic plans themselves); internal, external, and published FDNY documents; media reports, external reviews; analysis; and commentary determined the score. The extent to which the FDNY applied an element determined its score on a 0–5 scale. A comparative analysis of these scores to the PSPP determined the alignment and relative impact. Outcome analysis includes a list of elements sorted by percentage of variance from the PSPP, the amount each would have to be improved to fully attain the PSPP, and the percentage of impact those changes would make on the overall process (see Tables 8 and 9).

Table 8. Primary Comparative Analysis Matrix

Primary Comparative Analysis Matrix	%Wt	PSPP	FD	FD Wt	Var	% Total Attain	Improve Needed	% Total Impact
Revise/Create Mission Statement	4.50%	6.75	5	6.75	0.00	4.50%	0%	0.00%
Internal Analysis	3.75%	5.63	5	5.63	0.00	3.75%	0%	0.00%
Inclusion of Leaders	3.50%	5.25	5	5.25	0.00	3.50%	0%	0.00%
Create and Agree on Process	3.50%	5.25	5	5.25	0.00	3.50%	0%	0.00%
Leadership Support/Involvement	3.25%	4.88	5	4.88	0.00	3.25%	0%	0.00%
Identify Organizational Values	3.00%	4.50	5	4.50	0.00	3.00%	0%	0.00%
Report Externally	2.75%	4.13	5	4.13	0.00	2.75%	0%	0.00%
Internal Stakeholder Analysis	2.67%	4.00	5	4.00	0.00	2.67%	0%	0.00%
Develop Implementation Plan	3.00%	4.50	4	3.60	0.90	2.40%	20%	0.60%
Implementation Plan	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%
Implement Action Plan	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%
Accountability	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%
Develop Action Plan	3.50%	5.25	4	4.20	1.05	2.80%	20%	0.70%
Broad Perspective	2.67%	4.00	3	2.40	1.60	1.60%	40%	1.07%
Develop Strategic Plan	3.25%	4.88	3	2.93	1.95	1.95%	40%	1.30%
Future Orientation	2.50%	3.75	2	1.50	2.25	1.00%	60%	1.50%
Include Feedback Loop	4.00%	6.00	3	3.60	2.40	2.40%	40%	1.60%
Develop Objectives	4.00%	6.00	3	3.60	2.40	2.40%	40%	1.60%
Inclusion of Lower-Level Staff	2.00%	3.00	1	0.60	2.40	0.40%	80%	1.60%
Formulate Goals	4.25%	6.38	3	3.83	2.55	2.55%	40%	1.70%
Targets (Milestones)	3.00%	4.50	2	1.80	2.70	1.20%	60%	1.80%
Evaluate Goal/Object Attain	3.00%	4.50	2	1.80	2.70	1.20%	60%	1.80%
Inclusion of Managers	3.25%	4.88	2	1.95	2.93	1.30%	60%	1.95%
Evaluate Benchmarks	2.67%	4.00	1	0.80	3.20	0.53%	80%	2.13%
External Stakeholder Analysis	3.67%	5.50	2	2.20	3.30	1.47%	60%	2.20%
Formulate Overall Strategy	4.00%	6.00	2	2.40	3.60	1.60%	60%	2.40%
External Analysis	4.00%	6.00	1	1.20	4.80	0.80%	80%	3.20%
Evaluate Outcomes	3.25%	4.88	0	0.00	4.88	0.00%	100%	3.25%
Create Vision Statement	3.25%	4.88	0	0.00	4.88	0.00%	100%	3.25%
Inclusion of External Perspective	3.75%	5.63	0	0.00	5.63	0.00%	100%	3.75%
Total	100%	150	90	91	59	61%	55%	39%
							Average	

Table 9. Primary Comparative Analysis Matrix Legend

Code	Refers to	Code	Refers to
%Wt	That element % of total	Var	PSPP–FD-SPP Wt
PSPP	PSPP weighted score	% Tot Attain	FD-SPP Wt / PSPP total
FD	FD-SPP score	Improve Needed	% FD-SPP score increase needed to attain PSPP
FD Wt	FD-SPP weighted score	% Total Impact	% total increases if PSPP attained

Primary comparative analysis found FD-SPP scored 61% of the PSPP. Average 55% improvement in 22 of the 30 elements nets 39% overall impact to match the PSPP.

Eight elements attained 100% of the weighted goal:

- Revise/Create Mission Statement
- Internal Analysis
- Inclusion of Leaders
- Create and Agree on Process
- Leadership Support/Involvement
- Identify Organizational Values
- Report Externally
- Internal Stakeholder Analysis

Improve five elements 20% nets each a .5–1% total impact:

- Develop Implementation Plan
- Implementation Plan
- Implement Action Plan
- Accountability
- Develop Action Plan

Improve ten elements 40–80% nets each a 1–2% total impact:

- Broad Perspective (40%)
- Develop Strategic Plan (40%)
- Future Orientation (60%)
- Include Feedback Loop (40%)
- Develop Objectives (40%)

- Inclusion of Lower-Level Staff (80%)
- Formulate Goals (40%)
- Targets (Milestones) (60%)
- Evaluate Goal/Objective Attainment (60%)
- Inclusion of Managers (60%)

Improve three elements 60–80% nets each a 2–3% total impact:

- Evaluate Benchmarks (80%)
- External Stakeholder Analysis (60%)
- Formulate Overall Strategy (60%)

Improve one element 80%, implement three, nets each 3–4% total impact:

- External Analysis (80%)
- Evaluate Outcomes (100%)
- Create Vision Statement (100%)
- Include External Perspective (100%)

2. Secondary Comparative Analysis

The extent to which the BCG applied an element determined its score on a 0–5 scale. The Project Axiom report itself drove the scoring and delineated the process used to create it, along with limited historical knowledge of the process. Analysis excluded components that did not apply to the BCG-PP, as the report was not specifically a strategic plan, nor was it implemented. The comparative analysis of the weighted scores of the BCG-PP and PSPP determined their alignment. Adding the overlapping FDNY elements contrasted the approaches and comparative alignment with the PSPP. Analysis output is a list of elements sorted by the degree of variance from each other relative to the PSPP (see Tables 10 and 11).

Table 10. Secondary Comparative Analysis Matrix

Secondary Comparative Analysis Matrix	FD-SPP/PSPP (BCG)					BCG-PP/PSPP (BCG)					FD-SPP / BCG-PP Var
	FD-SPP	Var	%Total Attain	Imp Needed	% Total Impact	BCG-PP	Var	%Total Attain	Imp Needed	% Total Impact	
Internal Analysis	5	0.00	5.51%	0%	0.00%	3	2.21	3.31%	40%	2.21%	-40%
Internal Stakeholder Analysis	5	0.00	3.92%	0%	0.00%	4	0.78	3.14%	20%	0.78%	-20%
Inclusion of Leaders	5	0.00	5.15%	0%	0.00%	5	0.00	5.15%	0%	0.00%	0%
Create and Agree on Process	5	0.00	5.15%	0%	0.00%	5	0.00	5.15%	0%	0.00%	0%
Identify Organizational Values	5	0.00	4.41%	0%	0.00%	5	0.00	4.41%	0%	0.00%	0%
Revise/Create Mission Statement	5	0.00	6.62%	0%	0.00%	5	0.00	6.62%	0%	0.00%	0%
Develop Implementation Plan	4	0.88	3.53%	20%	0.88%	4	0.88	3.53%	20%	0.88%	0%
Develop Action Plan	4	1.03	4.12%	20%	1.03%	4	1.03	4.12%	20%	1.03%	0%
Inclusion of Lower-Level Staff	1	2.35	0.59%	80%	2.35%	1	2.35	0.59%	80%	2.35%	0%
Develop Strategic Plan	3	1.91	2.87%	40%	1.91%	4	0.96	3.82%	20%	0.96%	20%
Inclusion of Managers	2	2.87	1.91%	60%	2.87%	3	1.91	2.87%	40%	1.91%	20%
Develop Objectives	3	2.35	3.53%	40%	2.35%	5	0.00	5.88%	0%	0.00%	40%
Broad Perspective	3	1.18	1.76%	40%	1.18%	5	0.00	2.94%	0%	0.00%	40%
Formulate Goals	3	2.50	3.75%	40%	2.50%	5	0.00	6.25%	0%	0.00%	40%
External Stakeholder Analysis	2	3.24	2.16%	60%	3.24%	4	1.08	4.31%	20%	1.08%	40%
Future Orientation	2	2.21	1.47%	60%	2.21%	5	0.00	3.68%	0%	0.00%	60%
Formulate Overall Strategy	2	3.53	2.35%	60%	3.53%	5	0.00	5.88%	0%	0.00%	60%
External Analysis	1	4.71	1.18%	80%	4.71%	4	1.18	4.71%	20%	1.18%	60%
Create Vision Statement	0	4.78	0.00%	100%	4.78%	5	0.00	4.78%	0%	0.00%	100%
Inclusion of External Perspective	0	5.51	0.00%	100%	5.51%	5	0.00	5.51%	0%	0.00%	100%
Total	60	39	60%	57%	39%	86	12	87%	31%	12%	35%
				Avg.					Avg.		Avg.

Table 11. Secondary Comparative Analysis Matrix Legend

Code	Refers to	Code	Refers to
FD	FD-SPP score	% Tot Attain	FD-SPP or BCG-PP Wt / PSPP total
Var	PSPP–FD Wt	Imp Needed	% improvement in score needed to attain PSPP for element
BCG	BCG-PP score	% Total Impact	% total increases if PSPP attained for element
FD-SPP/BCG-PP Var	FD-SPP improvement needed–BCG-PP improvement needed		

a. BCG-PP / PSPP Secondary Analysis Results

BCG-PP elements attained a total score of 87% of the PSPP and an average 26% improvement in 9 of the 20 elements would net a 12% total impact to match the PSPP.

Eleven elements attained 100% of the weighted goal:

- Inclusion of Leaders
- Create and Agree on Process
- Identify Organizational Values
- Revise/Create Mission Statement
- Develop Objectives
- Broad Perspective
- Formulate Goals
- Future Orientation
- Formulate Overall Strategy
- Create Vision Statement
- Inclusion of External Perspective

Improve three elements 20% nets each a .5–1% total impact:

- Internal Stakeholder Analysis
- Develop Implementation Plan
- Develop Strategic Plan

Improve four elements 20–40% nets each a 1–2% total impact:

- Develop Action Plan (20%)
- Inclusion of Managers (40%)

- External Stakeholder Analysis (20%)
- External Analysis (20%)

Improve two elements 40–80% nets each a 2–3% total impact:

- Internal Analysis (40%)
- Inclusion of Lower-Level Staff (80%)

b. FD-SPP/PSPP Secondary Analysis Results

FD-SPP elements attained a total score of 58% of the PSPP and an average 39% improvement in 14 of the 20 elements would net a 39% total impact to match the PSPP. Improvement potential of FD-SPP elements does not apply in the context of this comparison. BCG-PP elements outscored FD-SPP elements 87% to 58%, respectively.

The FD-SPP outperformed the BCG-PP in two elements by percent indicated:

- Internal Analysis (60%)
- Internal stakeholder analysis (80%)

The FD-SPP and BCG-PP performed the same in seven elements:

- Inclusion of Leaders
- Create and Agree on Process
- Identify Organizational Values
- Revise/Create Mission Statement
- Develop Implementation Plan
- Develop Action Plan
- Inclusion of Lower-Level Staff

The BCG-PP outperformed the FD-SPP in eleven elements by percent indicated:

- Develop Strategic Plan (20%)
- Inclusion of Managers (20%)
- Develop Objectives (40%)
- Broad Perspective (40%)
- Formulate Goals (40%)
- External Stakeholder Analysis (40%)

- Future Orientation (60%)
- Formulate Overall Strategy (60%)
- External Analysis (60%)
- Create Vision Statement (100%)
- Inclusion of External Perspective (100%)

3. Limitations of the Comparative Analyses

The body of literature used to select and weight preferred elements of the strategic planning process included theories, studies, and findings through early 2016. Neither the FD-SPP (created in 2002/2003), nor the BCG-PP (utilized in 2012) benefit from current perspectives on strategic planning processes that have risen or fallen in prominence in their comparative analyses.

The comparative analysis used elements scored individually from multiple sources. The analysis does not account for the impact they may have on each other cumulatively or in combination. The researcher attempted to be as objective as possible in weighting and scoring the analysis, noting the significance of elements in the literature and extent of their application on the plans. However, each are subjective measurements (as is their use in the literature), and therefore subject to any personal or professional bias on the part of the researcher.

C. CHAPTER CONCLUSION

Chapter IV analyzed the strategic planning process at the FDNY since September 11, 2001, using a strategic planning process with weighted elements (components and characteristics) created from the literature as the preferred standard for comparison. Comparative analysis of the FDNY and BCG Project Axiom processes to the preferred standard yielded their respective alignment with it. Comparative analysis of those results contrasted the differences between each process, categorized by the impact they would have on the total planning process, including the percentage each would need to improve to achieve the preferred standard. Chapter V interprets the results, and combines them with subjective analysis to determine findings and recommendations.

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V. COMPARATIVE ANALYSES INTERPRETATION

The list of impacts and improvements from Chapter IV is re-grouped in this chapter by function within the process using the categories developed for the PSPP. The chapter goes on to subjectively identify precipitating factors and motivators that may have impacted the element's performance in the comparative analysis, and the costs, benefits, obstructions, and impact of maintaining, eliminating, improving, or implementing the element at the FDNY.

A. PRIMARY ANALYSIS RESULTS

The impact on the overall process categorized the results of the primary analysis. As noted in the limitations of the comparative analysis, many of these elements work in conjunction with others. Any assessment of their overall impact and whether the FDNY should maintain, eliminate, improve, or implement them requires an understanding of how they interact and in what combinations. Therefore, the results are grouped into the six functional categories of the PSPP: pre-formulation, formulation, planning, implementation, management, and characteristics (see Tables 12 and 13).

Grouping the comparative analysis results by function revealed the greatest potential for positive overall impact was in the *characteristics* grouping at 9.87%, followed by *management* at 9.65%, *formulation* at 9.50%, *planning* at 4.20%, *pre-formulation* at 3.25%, and *implementation* at 2.93%. These results may be deceptive, however, as a number of the characteristics apply to several functional groupings, and the number of elements selected for the PSPP was not balanced across the functions.

The greatest potential for positive overall impact in individual elements was the *inclusion of external perspective* (not applied by the FDNY) at 3.75%, *create a vision statement* (not applied by the FDNY) at 3.25%, *evaluate outcomes* (not applied by the FDNY) at 3.25% and *external analysis* (slightly applied by the FDNY) at 3.20%.

Table 12. Primary Comparative Analysis Outcome

Primary Comparative Analysis Outcome	PSPP		FD-SPP			Variance			
	%Wt	PrefPP Wt	FD-SPP	FD-SPP Wt	Var	% Total Attain	Improve Needed	% Total Impact	Impact Rank
Pre-Formulation	14.25%							3.25%	5
Create and Agree on Process	3.50%	5.25	5	5.25	0.00	3.50%	0%	0.00%	
Create Vision Statement	3.25%	4.88	0	0.00	4.88	0.00%	100%	3.25%	2
Revise/Create Mission Statement	4.50%	6.75	5	6.75	0.00	4.50%	0%	0.00%	
Identify Organizational Values	3.00%	4.50	5	4.50	0.00	3.00%	0%	0.00%	
Formulation	22.33%							9.50%	3
Internal Analysis	3.75%	5.63	5	5.63	0.00	3.75%	0%	0.00%	
External Analysis	4.00%	6.00	1	1.20	4.80	0.80%	80%	3.20%	4
Internal Stakeholder Analysis	2.67%	4.00	5	4.00	0.00	2.67%	0%	0.00%	
External Stakeholder Analysis	3.67%	5.50	2	2.20	3.30	1.47%	60%	2.20%	6
Formulate Overall Strategy	4.00%	6.00	2	2.40	3.60	1.60%	60%	2.40%	5
Formulate Goals	4.25%	6.38	3	3.83	2.55	2.55%	40%	1.70%	11
Planning	13.75%							4.20%	4
Develop Strategic Plan	3.25%	4.88	3	2.93	1.95	1.95%	40%	1.30%	16
Develop Objectives	4.00%	6.00	3	3.60	2.40	2.40%	40%	1.60%	12
Develop Action Plan	3.50%	5.25	4	4.20	1.05	2.80%	20%	0.70%	19
Develop Implementation Plan	3.00%	4.50	4	3.60	0.90	2.40%	20%	0.60%	24
Implementation	10.67%							2.93%	6
Include Feedback Loop	4.00%	6.00	3	3.60	2.40	2.40%	40%	1.60%	13
Implement Action Plan	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%	21
Implementation Plan	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%	22
Management	18.00%							9.65%	2
Targets (milestones)	3.00%	4.50	2	1.80	2.70	1.20%	60%	1.80%	9
Accountability	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%	23
Evaluate Goal/Object Attain	3.00%	4.50	2	1.80	2.70	1.20%	60%	1.80%	10
Evaluate Outcomes	3.25%	4.88	0	0.00	4.88	0.00%	100%	3.25%	3
Evaluate Benchmarks	2.67%	4.00	1	0.80	3.20	0.53%	80%	2.13%	7
Report Externally	2.75%	4.13	5	4.13	0.00	2.75%	0%	0.00%	
Characteristics	20.92%							9.87%	1
Leadership Support/Involvement	3.25%	4.88	5	4.88	0.00	3.25%	0%	0.00%	
Inclusion of Leaders	3.50%	5.25	5	5.25	0.00	3.50%	0%	0.00%	
Broad Perspective	2.67%	4.00	3	2.40	1.60	1.60%	40%	1.07%	17
Future Orientation	2.50%	3.75	2	1.50	2.25	1.00%	60%	1.50%	15
Inclusion of Lower Level Staff	2.00%	3.00	1	0.60	2.40	0.40%	80%	1.60%	14
Inclusion of Managers	3.25%	4.88	2	1.95	2.93	1.30%	60%	1.95%	8
Include External Perspective	3.75%	5.63	0	0.00	5.63	0.00%	100%	3.75%	1
Total	100%	149.88	90	90.78	59.10	61%	55%	39%	
Average									

Table 13. Primary Comparative Analysis Outcome Legend

Code	Refers to	Code	Refers to
%Wt	That element % of total	Var	PSPP–FD-SPP Wt
PSPP	PSPP weighted score	% Tot Attain	FD-SPP Wt / PSPP total
FD	FD-SPP score	Improve Needed	% FD-SPP score increase needed to attain PSPP
FD Wt	FD-SPP weighted score	% Total Impact	% total increases if PSPP attained

1. Characteristics

The FD-SPP attained a full score in 2 of the 7 characteristics of the PSPP, *leadership support/involvement* at 3.25%, and *inclusion of leaders* at 3.50%. The greatest potential for positive overall impact was *inclusion of external perspective* (not applied by the FDNY) at 3.75%, followed by *inclusion of managers* at 1.95%, *inclusion of lower-level staff* at 1.60%, *future orientation* at 1.5%, and *broad perspective* at 1.07%.

Current strategic planning experts consider broad and diverse inclusion in the strategic planning process invaluable. Exclusive participation detaches those creating the strategy from those who are responsible for implementing it, one of Mintzberg’s three fallacies of formal planning.¹¹⁶ According to Wolf and Floyd, “Participation is described in two dimensions: the extent of involvement (quantitative dimension) and the actual degree of influence on strategic decisions (qualitative dimension)...reduce bias and enhance goal convergence.”¹¹⁷ Inclusion gives employees a sense of ownership that manifests itself in commitment to the process.¹¹⁸ Participation in the strategy development process by middle managers has been shown to improve organizational performance, likely a result of their connections to both operations and top management.¹¹⁹

Other than the McKinsey Report commissioned after September 11, 2001, and the BCG Project Axiom report commissioned in 2012, the FDNY has not included representatives from outside the Department in the strategic planning process. The

¹¹⁶ Mintzberg, “The Fall and Rise of Strategic Planning,” 110.

¹¹⁷ Wolf and Floyd, “Strategic Planning Research,” 17.

¹¹⁸ Young, Reynolds, and Harris, “Organizational Strategic Planning and Execution,” 85.

¹¹⁹ Wolf and Floyd, “Strategic Planning Research,” 16.

mayor's office is involved inasmuch as it approves the strategic plan prior to publishing, occasionally requiring changes in the document, generally related to the funding of initiatives. Both McKinsey and BCG leveraged their significant and broad experience, expertise, and external perspective to objectively analyze the FDNY unencumbered by (but respectful of) the politics, history, and culture of the organization.

Direct input in the FD-SPP was mostly confined to bureau heads and assistant and deputy fire commissioners. Both McKinsey and BCG ensured widespread input into their plans by incorporating more than fifty fire and EMS personnel into the process, including a number of managers—far more than were involved in the formation of any of the FDNY strategic plans.

The FDNY engaged bureau heads to present current and future initiatives to the POC and PWG. Initiatives forwarded by bureau heads to the POC/AG and the PWG required collaboration and consensus among members to be included in the plan.¹²⁰ The controlling variable was the horizontal and vertical inclusiveness of the PWG members. Participation in the planning groups shifted from inclusive to exclusive over their three iterations. By the 2015–2017 plan, the strategic planning group involved only the highest hierarchical levels of the organization, assistant commissioners and above (other than the director of strategic planning).¹²¹ See Appendix B for more information.

The FDNY attempted to reach out to all levels of the organization for input in the 2009–2010 and 2011–2013 plans through surveys, but they were forwarded through the chain of command and in most cases did not penetrate the organization's lower levels. As such, the surveys garnered limited response, only thirty-eight for the 2009–2010 plan and sixty for the 2011–2013 plan. The FDNY did not distribute a survey for the 2015–2017 plan.¹²² The lack of input received from the bureaus, commands, and all members of the Department did not capture a representative sample of the more than 15,000 FDNY

¹²⁰ Meta Ribowsky (FDNY Strategic Planning Unit director), in discussion with author, 2016.

¹²¹ Ibid.

¹²² Ibid.

employees. Attempts to include ideas from a broad and diverse cross-section of members were insufficient and underutilized, and resulted in limited response.

Though often referred to as the “FDNY’s first strategic plan,” the McKinsey report was more of a gap analysis of the FDNY’s response on 9/11. It was introspective, retrospective, and prospective, with a short planning horizon and recommendations intended for rapid implementation. Both the McKinsey report and all five FDNY plans used a short-term planning horizon (the 2015–2017 plan lists objectives as short-term, intermediate, and long-term, though it does not define the terms’ limits). Using a short planning horizon led to short-term goals and objectives in the FDNY strategic plans. Conversely, CTDP demonstrated long-term thinking in the *Terrorism and Disaster Preparedness Strategy* of 2007, indicating preparedness efforts “must include a long-term vision for the Department’s state of preparedness and an organizational methodology that can overcome and outlive transient obstacles.”¹²³

The FD-SPP applied to the whole Department and touched on a thorough cross-section of the bureaus and commands that it encompasses. The plans did not present a coordinated effort toward a shared over-arching view as they were compartmentalized and defined incremental improvements in each area. This is likely the result of the lack of a vision statement and over-arching strategy. Again contrasting the FDNY strategic plans, the two strategies published by the CTDP describe a broad but coordinated effort toward a shared goal.

2. Management

The FD-SPP attained a full score in 1 of the 6 management components of the PSPP, *report externally* at 2.75%, and scored well in *accountability* at 2.67%, with little improvement needed. The greatest potential for positive overall impact was *evaluate outcomes* (not applied by the FDNY) at 3.25%, followed by *evaluate benchmarks* at 2.13%, *targets (milestones)* at 1.80%, and *evaluate goal/objective attainment* at 1.80%.

¹²³ CTDP, *Terrorism and Disaster Preparedness Strategy*, 11.

Strategic plans require an evaluation component to ensure they are netting desired results, are on track for implementation, and the goals are still desired in the dynamic and changing environment. According to the Industrial College of the Armed Forces:

An organization must and can develop a strategic plan that includes specific and measurable goals...and cover all the areas where action is needed to move toward the vision...actions should clearly state who is responsible for their completion. Actions should have milestones tied to them so progress toward the goals can be measured.¹²⁴

The FDNY does not have a formal evaluation process for strategic plan performance. Though it assesses objective attainment, it has not published the results publicly since 2006, and the internal process is informal. Goals are not presented in a measurable format in the plan.

Attaining objectives designed to achieve a goal intuitively leads one to believe the goals are (at least in the process of) being met, but objectives are generally worded as *outputs*, while goals are worded as *outcomes*. According to Bryson: “Outputs are the actual actions, behaviors, products, services, or other direct consequences produced...Outcomes are the benefits of the outputs...and the larger meanings attached to those outputs.”¹²⁵ The FDNY has not presented a measurement of goal attainment for any individual plan, or over the course of the plans (since the goals have remained essentially the same). The goals are also difficult to quantify due to their wording (using terms like improve, enhance, strengthen, and increase without specifying to what extent).

Without a practical application of the strategic plan that can drive performance metrics, the plan runs the risk of remaining unfulfilled. The universally recognized adage “what gets measured gets done” highlights its importance.¹²⁶ Edwards stresses that tying the strategic planning process with the performance management system of an organization “is vital because strategic planning requires good performance information

¹²⁴ Industrial College of the Armed Forces and National Defense University Press, *Strategic Leadership and Decision Making*, chap. 18, pg. 9.

¹²⁵ Bryson, *Strategic Planning for Public and Nonprofit Organizations*, 240.

¹²⁶ David Osborne, *Reinventing Government : How the Entrepreneurial Spirit Is Transforming the Public Sector* (Boston: Addison-Wesley, 1992), 146.

while the creation of performance indicators depend on a clearly defined strategy for the organization.”¹²⁷ Young, Reynolds, and Harris relate: “Without measurement, there is no means for feedback and evaluation, and therefore strategies can become stagnant, decoupled from their intended effect.”¹²⁸

Cohen and Eimicke stress that goals and the activities designed to accomplish them require metrics to be meaningful, which they define as operational and resulting in actual organizational behaviors, adding, “the measurements should not only demonstrate that the goal is being achieved, but should also measure the quality of the goal being achieved.”¹²⁹ A performance indicator’s specificity is based on how general the goal is and, ideally, should include both objective and subjective indicators.¹³⁰

Determining objective attainment is not a scientific process at the FDNY as neither the objectives nor their tasks are weighted to account for difficulty in completion (time, funding, manpower) or significance in attaining their stated goals. The objectives themselves are difficult to quantify due to their wording and were subjectively appraised based on a number of factors, such as number of major milestones achieved or percentage of total funding spent out of total money allocated. Objectives that are specific and closed-ended (e.g., delivery of new apparatus) are deemed 100% complete when fully implemented. Objectives that have a rolling implementation (e.g., specialized training) are deemed complete and ongoing when fully developed and implementation has begun but will take more than a year to complete.¹³¹

The FDNY used the number of objectives completed as the quantifier of success in strategic plan implementation. The objectives presented in the McKinsey report were 30% completed within two years (34% in three), when the first FDNY strategic plan was published. The 2004–2005 plan had the best completion rate, with 30% of objectives

¹²⁷ Edwards, “Strategic Planning in Local Government,” 26–27.

¹²⁸ Young, Reynolds, and Harris, “Organizational Strategic Planning and Execution,” 29.

¹²⁹ Steven Cohen and William B. Eimicke, “Management Innovation in Improving Response Time at New York City’s Fire Department (FDNY),” paper presented at the Fall Research Conference of the Association of Policy Analysis and Management, Baltimore, MD, November 8–10, 2012, 3.

¹³⁰ *Ibid.*, 4.

¹³¹ Meta Ribowsky (FDNY Strategic Planning Unit director), in discussion with author, 2016.

complete within two years (95% in three). This number is deceptive, however, as 8 of the 20 objectives were carried over from the McKinsey report and therefore had a two-year head start. Most of the other plans completed between 60% and 80% of their objectives within three years. See Appendix C for more information.

The “Background, Accomplishments, Next Steps and Timeframes, and Lead Bureau” format of the first two FDNY strategic plans was a framework for transparent and public accountability. However, this transparency may create political opposition; by specifying what the organization will do, you are also making it clear what the organization will not do. As Cohen and Eimicke indicate: “This can stimulate political opposition to the organization and can also stimulate segments of the public and interest groups that were previously unaware of the organization’s plans.”¹³²

The quarterly review process the FDNY implemented with their first plan and continues to use today keeps the focus on objective completion and holds the lead bureau/manager responsible for achieving critical milestones in his or her respective projects. Tracking this progress in the Priority Projects Report and distributing it among the senior staff also keeps stakeholders focused on attaining objectives.¹³³ This recurring focus has been integral to the high percentage of objective attainment in a timely fashion throughout the FDNY’s strategic planning history.

3. Formulation

The FD-SPP attained a full score in 2 of the 6 formulation components of the PSPP, *internal analysis* at 3.75% and *internal stakeholder analysis* at 2.67%. The greatest potential for positive overall impact was *external analysis* (not applied by the FDNY) at 3.20%, followed by *formulate overall strategy* at 2.40%, *external stakeholder analysis* at 2.20%, and *formulate goals* at 1.70%.

The FDNY did not complete formal analyses of its current state and successive strategic planning started with the previous plan, leading to only incremental

¹³² Cohen, Eimicke, and Heikkila, *The Effective Public Manager*, 143.

¹³³ Meta Ribowsky (FDNY Strategic Planning Unit director), in discussion with author, 2016.

improvements. As Hamel and Prahalad note, “The starting point for next year’s strategy is almost always this year’s strategy...The company sticks to segments and territories it knows, even though the real opportunities may be elsewhere.”¹³⁴ The FDNY did not complete formal external analyses for any of its strategic plans either. Awareness of the external environment was implicitly the responsibility of the leaders/bureau heads that recommended initiatives.

The goals listed in the first and succeeding FDNY strategic plans represent a categorization of objectives, not desired outcomes. They are vague, not measurable, do not have specific actions or timelines, and are stated as categories more than goals. As the Department achieved these short-term goals, rebuilding the response capability, it did not shift to a longer planning horizon focusing on long-term goals and objectives. The plans became stagnant, with the same goals twelve years running.

The FDNY never specified an overall strategy in any of its strategic plans. The initial implicit strategy was to see where the strategic planning process would take it. The FDNY implicitly conducts external stakeholder analyses when obtaining approval to publish its strategic plans. However, it does not formally conduct analyses of the many stakeholders of Department outputs, including other agencies with which it frequently interacts (NYPD, NYCEM, DOB, PANYNJ, MTA, etc.) and private/public utility companies (Con Edison, Brooklyn Union Gas, etc.), in addition to many others.

4. Planning

The FD-SPP scored well in 2 of the 4 planning components of the PSPP, *develop action plan* at 2.80%, and *develop implementation plan* at 2.40% with little improvement needed. The greatest potential for positive overall impact was *develop objectives* at 1.60%, followed by generate strategic plan at 1.30%.

Using the SMART acronym to describe the objectives in the FDNY strategic plans, they are clear and specific, actionable, and realistic. The objectives are often not measurable or timed or presented in a way that clarifies what and when it takes for them

¹³⁴ Gary Hamel and C. K. Prahalad, “Strategic Intent,” *Harvard Business Review* 83, no. 7/8 (August 7, 2005): 161.

to be successfully attained. The fact that only four strategic plans produced and implemented by two commands in the Department is both indicative of the effort and perseverance required by their respective leadership and the lack of penetration strategic planning made throughout the Department. The polished, professional look of the plans that were produced may have discouraged other commands from attempting them.

5. Pre-formulation

The FD-SPP performed extremely well in this functional category, attaining a full score in 3 of the 4 pre-formulation components of the PSPP, *create and agree on process*, *revise/create mission statement*, and *identify organizational values*. The greatest potential for positive overall impact was *create vision statement* (not applied by the FDNY) at 3.25%.

The revised mission statement reflected the broader role the FDNY was playing in life safety and homeland security, but notably missing from the FDNY's strategic plan process was a specified vision of what and where it wants the organization to be at some future point (known as the future state of the organization). Though mentioned in the chief of department's written message at the beginning of the first plan, "the Department's vision is one of partnership between uniformed and civilian members that will build on our core competencies to handle all fires, pre-hospital care and emergencies, as well as new challenges," it was not included in the body of the plan nor specified as a vision statement in any of the FDNY strategic plans.¹³⁵

In contrast to the FDNY strategic plans, the two strategies published by the CTDP describe a broad but coordinated effort toward a shared goal. The goals and objectives in these plans aligned a cross-section of the Department with a clearly expressed future state, incorporating flexible and adaptable components that mitigate problems with the strategic planning process. CTDP defined its role as the nexus for preparedness in the FDNY, coordinating multiple internal and external stakeholder goals and objectives into an overarching vision of emergency preparedness, with both short-term and long-term

¹³⁵ "FDNY Strategic Plan: 2004–2005," FDNY, COD Message.

strategic planning horizons. CTDPP explicated a vision and articulated a process to achieve it, with provision for adapting it to the ever-changing threat environment.

The lack of a vision impacted several strategic planning components at the FDNY. It did not encourage long-term thinking and contributed to the short-term goals and objectives in the FDNY strategic plans. Without a future state to compare relative goal accomplishment, there is no way to quantify the progress or success of the strategic plans. Without a vision, goals and objectives are difficult to measure and put on a timeline.

The FDNY did not provide a cohesive vision or strategy that would guide its efforts past the next few years. The lack of a specified vision or overall strategy combined with a short planning horizon contributed to the short-term goals and objectives expressed in the FDNY strategic plans. The combination of a short planning horizon, lack of an expressed vision and overall strategy, and short-term objectives could characterize the FDNY strategic plans more as action plans than strategic plans.

6. Implementation

The FD-SPP scored well in 2 of the 3 implementation components of the PSPP, *implement action plan* and *implementation plan* both at 2.67% with little improvement needed. The greatest potential for positive overall impact was *feedback loop* at 1.60%.

Each FDNY strategic planning cycle begins with a list of initiatives from the bureaus and commands. This allows for the emergence of innovative ideas and new approaches to feedback into the strategic planning process. The FDNY also allows for parallel development of concepts that were not ready or able to be included in that cycle's strategic plan, or proposed between planning cycles. Thus, the strategic planning process does not squash these ideas or concepts, and if they develop or blossom, they are incorporated into future strategic plans. By reaching out to all levels of the organization for input in the 2009–2010 and 2011–2013 plans through surveys, the FDNY allowed innovative and emergent ideas to be forwarded, though constrained by the breadth and hierarchical level from which they were culled, and if they were championed along the way.

B. SECONDARY ANALYSIS RESULTS

The degree of variance between the FD-SPP and the BCG-PP relative to the PSPP categorized the secondary comparative analysis results. The analysis found FD-SPP elements attained a total score of 60% of the PSPP and an average 54% improvement in 14 of the 20 elements would net a 39% total improvement to match the PSPP. BCG-PP elements attained a total score of 87% of the PSPP and an average 26% improvement in 9 of the 20 elements would net a 12% total improvement to match the PSPP.

The BCG-PP outperformed the FD-SPP by a wide margin: 87% to 60%. The FD-SPP did perform better than the BCG-PP in two elements: *internal analysis* by 40%, and *internal stakeholder analysis* by 20%, likely a result of the limited time BCG had to produce the Project Axiom report. The two processes had identical scores in seven of the elements. BCG-PP scored higher than FD-SPP in eleven elements. The biggest differences between FD-SPP and BCG-PP were *inclusion of external perspective*, and *create a vision statement*, both not applied by the FDNY and scored 100% by BDC-PP.

BCG-PP scored 60% higher than FD-SPP in three elements: future orientation, formulate overall strategy, and external analysis; 40% higher on four elements: *develop objectives*, *broad perspective*, *formulate goals*, and *external stakeholder analysis*; and 20% better on two elements: *develop strategic plan*, and *inclusion of managers*. As noted in the interpretation of primary analysis results, the results are grouped into functional categories with the exception of *implementation* and *management*, as the BCG Project Axiom report was not specifically a strategic plan and the FDNY has yet to implement any of its recommendations. This data is presented in Tables 14 and 15.

Table 14. Secondary Comparative Analysis Outcome

Secondary Comparative Analysis Outcome	FD-SPP/PSPP (BCG)					BCG-PP/PSPP (BCG)					FD-SPP / BCG-PP Var
	FD-SPP	Var	%Total Attain	Imp Needed	% Total Impact	BCG-PP	Var	%Total Attain	Imp Needed	% Total Impact	
Pre-formulation											
Create and Agree on Process	5	0.00	5.15%	0%	0.00%	5	0.00	5.15%	0%	0.00%	0%
Create Vision Statement	0	4.78	0.00%	100%	4.78%	5	0.00	4.78%	0%	0.00%	100%
Revise/Create Mission Statement	5	0.00	6.62%	0%	0.00%	5	0.00	6.62%	0%	0.00%	0%
Identify Organizational Values	5	0.00	4.41%	0%	0.00%	5	0.00	4.41%	0%	0.00%	0%
Formulation											
Internal Analysis	5	0.00	5.51%	0%	0.00%	3	2.21	3.31%	40%	2.21%	-40%
External Analysis	1	4.71	1.18%	80%	4.71%	4	1.18	4.71%	20%	1.18%	60%
Internal Stakeholder Analysis	5	0.00	3.92%	0%	0.00%	4	0.78	3.14%	20%	0.78%	-20%
External Stakeholder Analysis	2	3.24	2.16%	60%	3.24%	4	1.08	4.31%	20%	1.08%	40%
Formulate Overall Strategy	2	3.53	2.35%	60%	3.53%	5	0.00	5.88%	0%	0.00%	60%
Formulate Goals	3	2.50	3.75%	40%	2.50%	5	0.00	6.25%	0%	0.00%	40%
Planning											
Develop Strategic Plan	3	1.91	2.87%	40%	1.91%	4	0.96	3.82%	20%	0.96%	20%
Develop Objectives	3	2.35	3.53%	40%	2.35%	5	0.00	5.88%	0%	0.00%	40%
Develop Action Plan	4	1.03	4.12%	20%	1.03%	4	1.03	4.12%	20%	1.03%	0%
Develop Implementation Plan	4	0.88	3.53%	20%	0.88%	4	0.88	3.53%	20%	0.88%	0%
Characteristics											
Future Orientation	2	2.21	1.47%	60%	2.21%	5	0.00	3.68%	0%	0.00%	60%
Broad Perspective	3	1.18	1.76%	40%	1.18%	5	0.00	2.94%	0%	0.00%	40%
Inclusion of Leaders	5	0.00	5.15%	0%	0.00%	5	0.00	5.15%	0%	0.00%	0%
Inclusion of Managers	2	2.87	1.91%	60%	2.87%	3	1.91	2.87%	40%	1.91%	20%
Inclusion of Lower-Level Staff	1	2.35	0.59%	80%	2.35%	1	2.35	0.59%	80%	2.35%	0%
Inclusion of External Perspective	0	5.51	0.00%	100%	5.51%	5	0.00	5.51%	0%	0.00%	100%
Total	60	39	60%	57%	39%	86	12	87%	31%	12%	35%
				Avg.					Avg.		Avg.

Table 15. Secondary Comparative Analysis Outcome Legend

Code	Refers to	Code	Refers to
FD	FD-SPP score	% Tot	% of total FD-SPP or BCG-PP weighted score attained
Var	PSPP–FD/BCG Wt	Imp Needed	% improvement in score needed to attain PSPP for element
BCG	BCG-PP score	% Total	% total increases if PSPP attained for element
FD-SPP/BCG-PP Var		FD-SPP improvement needed–BCG-PP improvement needed	

1. Characteristics

The BCG-PP scored higher than the FD-SPP in 4 characteristics: *inclusion of external perspective* (not applied by the FDNY) by 100%, followed by *future orientation* by 60%, *broad perspective* by 40% and *inclusion of managers* by 20%.

The quality of the Project Axiom report is a shining example of the benefit of external perspective on the strategic planning process, especially when in the form of professional, experienced, qualified, respected, and renowned consulting services. BCG leveraged its broad experience and vast analytical tools to provide an in-depth analysis. BCG defined the demand landscape (what the projected demand for services will be) and projected changes through 2030 in an analysis of the past and predicted future trends in the FDNY’s core activities: fire, medical, rescue, and disaster insurance. BCG factored in the continued risk of terrorism and extreme weather events, a projected decline in fire and increase in medical response needs, and the reality of increasing fiscal pressure on the nearly \$1.67 Billion FDNY operating budget (FY2012).¹³⁶

Project Axiom looked broadly at the internal and external environments in which the FDNY operates, accounting for the network of interconnected stakeholders that impact the FDNY’s current and future success. BCG incorporated this perspective with a long-term planning horizon to ensure that the many drivers and controlling factors that impact the FDNY are considered when analyzing its current state and projecting multiple scenarios for its future state. Project Axiom used a diverse and cross-sectional group of FDNY employees to provide input in brainstorming sessions.

¹³⁶ “FDNY Vital Statistics: CY 2012,” FDNY, accessed September 21, 2016, 1, http://www.nyc.gov/html/fdny/pdf/vital_stats_2012_cy.pdf.

2. Formulation

The FD-SPP scored higher than the BCG-PP in 2 elements: *internal analysis* by 60%, and *internal stakeholder analysis* by 40%. These scores are most likely the result of BCG only spending three months with the FDNY while conducting the research for their report. The BCG-PP scored higher than the FD-SPP in 4 components: *external analysis* by 60%, *formulate overall strategy* by 60%, *external stakeholder analysis* by 40%, and *formulate goals* by 40%.

Project Axiom analyzed external opportunities and constraints, incorporating political acumen and analytical tools, and analyzing both current and future environments in which the FDNY may operate, making recommendations for both. It provided an overall strategy that ties in with the vision for the future state of the FDNY, incorporating broad and long-term ideas and providing a roadmap to attain the vision.

BCG conducted significant analysis on the external stakeholders that the FDNY needs to embrace in order to prepare for the future environment. The group analyzed the community engagement and policy input that would be necessary on local, state, and national levels to enable many of its recommendations for future development. Project Axiom provided a number of attainable goals toward realizing its vision of FDNY's future state. The goals are specific, measurable, actionable, realistic (though difficult), and timed (SMART).

3. Pre-formulation

The BCG-PP scored higher than the FD-SPP in one component of this function, *create vision statement* (not applied by the FDNY) by 100%. BCG described a very clear vision for the FDNY by the year 2030 in the Project Axiom report:

- One Department, one family
- Flexible leader in meeting NYC life safety demands
- Inclusive community engagement with open-door policy
- Greater input in policy at the regional, state, and national levels¹³⁷

¹³⁷ Boston Consulting Group, *Project Axiom*, 9, SC3.

The vision of a future state was important for BCG due to the 18-year planning horizon for Project Axiom, and less important in the FDNY strategic plans due to their short planning horizon.

4. Planning

The BCG-PP scored higher than the FD-SPP in 1 component of the planning function, *develop objectives* by 40%. Project Axiom listed specific actions the FDNY needed to take in order to accomplish the goals required to realize the vision. Because Project Axiom was a report and not specifically a strategic plan, it focused on long-term and broad recommendations, above the level that requires development of objectives.

C. PROJECT AXIOM

The Project Axiom planning process clearly outperformed the FDNY strategic planning process in this analysis, attaining 87% of the PSPP elements compared to 60% for the FD-SPP. The BCG-PP outscored the FD-SPP in 11 of the 20 elements, tied in 7 of 20, and the FD-SPP outscored the BCG-PP in 2. These results beg the question: Why did the FDNY not implement any of the BCG Project Axiom recommendations to date?

As is the case with most seemingly simple questions in this environment, there are no simple answers. The researcher was unable to get a specific and clear response to inquiries on the topic, and posits several theories based on the extensive research conducted within the FDNY. These are a combination of information gathered informally, an analysis of the internal and external environment at the time, and personal (therefore subjective) insight into the question.

1. Political, Public, and Financial Support

The post-9/11 environment included virtually universal political and public support for the FDNY. Obtaining approval and funding for rebuilding and new initiatives was relatively easy. Local, state and federal officials were eager and quick to approve FDNY initiatives, though sometimes it was seen as an opportunity to capitalize politically on the moment.

The high percentage of McKinsey recommendations implemented within two years reflects this support, as funding is the easiest way to support, derail, or delay objective completion. The FDNY consistently obtained funding through federal homeland security grants, a testament to the FDNY's grant request writers and the value of the strategic plans. As time passed without any significant terrorist attacks in the United States, political and public support waned. By the time BCG released Project Axiom, the environment had changed dramatically, and it was questionable if the political and financial support that would have been required to implement the Project Axiom recommendations was available.

2. Leadership Turnover/Election Cycles

In order to provide the accountability that the public increasingly demands, public sector culture is changing to adopt a more corporate philosophy. However, the need to maintain services at any cost in the public sector mitigates the strategic concerns of high profitability and high company mortality that are so prevalent in the private sector. These risks are manifested in the public sector through leadership turnover or reduced funding for the organization. This creates a paradox that can cause public sector leadership to be more risk-averse, knowing that while great success is rewarded, a high degree of failure is instant-death, leading them to create and employ middle-of-the road strategies.¹³⁸

The FDNY benefited from a continuity of leadership for many years after 9/11, as Mayor Bloomberg was elected to three successive terms (2002–2014) and only had two fire commissioners during his tenure: Nicholas Scopetta and Salvatore Cassano, formerly chief of department in Commissioner Scopetta's administration. The FDNY produced extraordinary accomplishments over this time period, rebuilding the Department after 9/11, improving the FDNY's core competencies in virtually every statistical way, and vastly improving the FDNY's ability to respond to all-hazard events.¹³⁹

Turnover in leadership is common with new administrations, and the leadership continuity the FDNY enjoyed for twelve years after 9/11 is rare. The four-year election

¹³⁸ Raynor, *The Strategy Paradox*, 1368.

¹³⁹ Robert Sweeney, "FDNY Stands Prepared and Ready to Meet Any Challenge," *WNYF*, 2011, 6.

cycle creates an uncertainty that can inhibit strategic planning, since political leaders' temporal perspective tends to align with that cycle. By the time a new administration takes control and is able to introduce its priorities and objectives (and realize some results), the political machine has to start gearing up for the next election cycle.¹⁴⁰ Focusing on a long-term planning horizon that extends past the current election cycle can be difficult in this environment.

The leadership turnover/election cycle can also inhibit implementation of innovative, game-changing ideas of significant impact. The political capital required to overcome numerous internal and external barriers to change can cost leaders the support required to implement the short-term initiatives necessary for maintaining incremental performance improvement.

The FDNY began evaluating the recommendations in 2013, the last year of the FDNY Strategic Plan 2011–2013, during which the next strategic plan would normally be formulated. But the 2013 mayoral election loomed and a change of administration was inevitable (Mayor Bloomberg had already extended his mayoralty past the previous term limit). Knowing the next strategic plan would apply to the incoming administration in 2014, the FDNY did not formulate it in 2013.

3. External Stakeholders

The Project Axiom recommendations called for radical change to the FDNY with enormous hurdles to overcome. The vision BCG presented would require significant changes in regulations; federal, state, and private insurance reimbursement; state regulations, and labor contracts. The support of the rank-and-file, labor unions, city government, state regulators, local politicians, and federal agencies would be necessary and difficult to obtain.

4. Project Axiom Conclusions

The Project Axiom report explicated a vision, utilized a long-term planning horizon (eighteen years), and included broad and diverse input from over fifty people in a

¹⁴⁰ Young, Reynolds, and Harris, "Organizational Strategic Planning and Execution," 29.

cross-section of the FDNY. BCG synthesized ideas with in-depth analysis to produce creative, innovative, strategic options that the FDNY could evaluate for implementation. The inertia caused by pending leadership turnover secondary to the election cycle and the monumental effort required to take on the extraordinary challenges at great political risk kept Project Axiom recommendations from being implemented.

Having BCG produce analysis at the level of Project Axiom pro bono was a coup for the FDNY. Consulting at this elite level is very expensive, and the FDNY may not have been able to fund it, nor would it be able to do so on a regular basis in the future. The next administration formulated the FDNY strategic plan after Project Axiom (FDNY Strategic Plan 2015–2017), yet barely addressed its recommendations, with only three of the twenty-four plan objectives touching on Project Axiom recommendations (one short-term, one intermediate, and one long-term). Though Project Axiom presented in-depth, professional, strategically oriented recommendations, they have not been embraced by the FDNY, essentially wasting a rare opportunity.

D. CHAPTER CONCLUSION

This chapter interpreted the results of the comparative analysis in Chapter IV, categorized by the impact they would have on the total planning process if improved. Primary analysis interpretation reviewed the results of the FD-SPP/PSPP comparison, describing why elements met or failed to meet the PSPP standards. Secondary analysis interpretation reviewed the results of FD-SPP/BCG-PP comparison, describing and interpreting the gaps between the FD-SPP and BCG-PP performance in those elements.

Chapter VI lists recommendations developed from this analysis and interpretation, sorted into the same five of the same six functional categories: pre-formulation, formulation, planning, implementation, and management, with characteristics added to their associated function.

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VI. RECOMMENDATIONS

Chapter V evaluated the results from the qualitative comparative analysis performed in chapter IV, subjectively interpreting cause and effect for the strategic planning process elements requiring improvement. This chapter combines the results from Chapters IV and V, formulating recommendations based on overall positive impact to the strategic planning process, relative costs associated with the recommendation, and the perceived effort required to implement it.

The recommendations are sorted within the functional categories used throughout this thesis: pre-formulation, formulation, planning, implementation, and management, with the exception of characteristics, which are incorporated into the category they most impact. The primary outcome matrix for recommendations includes the functional categories with characteristics added, as shown in Tables 16 and 17.

Table 16. Primary Outcome Matrix for Recommendations

Primary Outcome Recommendation Matrix	PSPP		FD-SPP			Variance			
	%Wt	PrefPP Wt	FD-SPP	FD-SPP Wt	Var	% Total Attain	Imp Needed	% Total Impact	Impact Rank
Pre-Formulation								5.82%	5
Create and Agree on Process	3.50%	5.25	5	5.25	0.00	3.50%	0%	0.00%	
Create Vision Statement	3.25%	4.88	0	0.00	4.88	0.00%	100%	3.25%	2
Revise/Create Mission Statement	4.50%	6.75	5	6.75	0.00	4.50%	0%	0.00%	
Identify Organizational Values	3.00%	4.50	5	4.50	0.00	3.00%	0%	0.00%	
Leadership Support/Involvement	3.25%	4.88	5	4.88	0.00	3.25%	0%	0.00%	
Broad Perspective	2.67%	4.00	3	2.40	1.60	1.60%	40%	1.07%	17
Future Orientation	2.50%	3.75	2	1.50	2.25	1.00%	60%	1.50%	15
Formulation								16.80%	3
Internal Analysis	3.75%	5.63	5	5.63	0.00	3.75%	0%	0.00%	
External Analysis	4.00%	6.00	1	1.20	4.80	0.80%	80%	3.20%	4
Internal Stakeholder Analysis	2.67%	4.00	5	4.00	0.00	2.67%	0%	0.00%	
External Stakeholder Analysis	3.67%	5.50	2	2.20	3.30	1.47%	60%	2.20%	6
Formulate Overall Strategy	4.00%	6.00	2	2.40	3.60	1.60%	60%	2.40%	5
Formulate Goals	4.25%	6.38	3	3.83	2.55	2.55%	40%	1.70%	11
Inclusion of Lower-Level Staff	2.00%	3.00	1	0.60	2.40	0.40%	80%	1.60%	14
Inclusion of Managers	3.25%	4.88	2	1.95	2.93	1.30%	60%	1.95%	8
Inclusion of Leaders	3.50%	5.25	5	5.25	0.00	3.50%	0%	0.00%	
Include External Perspective	3.75%	5.63	0	0.00	5.63	0.00%	100%	3.75%	1
Planning								4.20%	4
Develop Strategic Plan	3.25%	4.88	3	2.93	1.95	1.95%	40%	1.30%	16
Develop Objectives	4.00%	6.00	3	3.60	2.40	2.40%	40%	1.60%	12
Develop Action Plan	3.50%	5.25	4	4.20	1.05	2.80%	20%	0.70%	19
Develop Implementation Plan	3.00%	4.50	4	3.60	0.90	2.40%	20%	0.60%	24
Implementation								2.93%	6
Include Feedback Loop	4.00%	6.00	3	3.60	2.40	2.40%	40%	1.60%	13
Implement Action Plan	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%	21
Implementation Plan	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%	22
Management								9.65%	2
Targets (Milestones)	3.00%	4.50	2	1.80	2.70	1.20%	60%	1.80%	9
Accountability	3.33%	5.00	4	4.00	1.00	2.67%	20%	0.67%	23
Evaluate Goal/Object Attain	3.00%	4.50	2	1.80	2.70	1.20%	60%	1.80%	10
Evaluate Outcomes	3.25%	4.88	0	0.00	4.88	0.00%	100%	3.25%	3
Evaluate Benchmarks	2.67%	4.00	1	0.80	3.20	0.53%	80%	2.13%	7
Report Externally	2.75%	4.13	5	4.13	0.00	2.75%	0%	0.00%	
Total	87%	150	90	91	59	61%	55%	32%	

Average

Table 17. Primary Outcome Matrix for Recommendations Legend

Code	Refers to	Code	Refers to
%Wt	That element % of total	Var	PSPP–FD-SPP Wt
PSPP	PSPP weighted score	% Tot Attain	FD-SPP Wt / PSPP total
FD	FD-SPP score	Improve Needed	% FD-SPP score increase needed to attain PSPP
FD Wt	FD-SPP weighted score	% Total Impact	% total increases if PSPP attained

A. PRE-FORMULATION

1. Extend and Tier the Strategic Planning Horizon

- Impact: 1.50% overall (future orientation)
- Cost: negligible
- Difficulty: moderate

This thesis recommends the FDNY extend its planning horizon to short-term (one–two years), medium-term (five years), and long-term (ten years) for each strategic plan. Short-term focuses on goals that have been prioritized for near-term implementation utilizing existing funding and resources allocated to upcoming objectives. Medium-term focuses on goals that require more than two years to implement and obtain funding, or resources requiring more than two years to obtain, including authorization and funding for increased staff and capital budget purchases. Long-term focuses on a vision of the future state of the organization in ten years and the decisions, sources of funding, legal or governmental policy, that need to be addressed in the next two to five years to begin to set up for success. Extending the planning horizon has the added effect of encouraging leaders, managers, and staff to think long-term and not just focus on the immediate future.

2. Develop a Vision Statement

- Impact: 4.32% overall
 - Create vision statement: 3.25%
 - Broad perspective: 1.07%
- Cost: negligible
- Difficulty: significant

Developing a vision statement that articulates a desired future state of the organization within the planning horizon provides an over-arching framework for Department-wide strategy and direction for the strategic plan goals and objectives. The vision should apply to the long-term planning horizon of ten years, providing the temporal framework for the strategic planning process. The vision should be updated as plans are revised and new ones are created, accommodating changes in the environment. As Satell writes: “Often, a vision has a shelf life. It works for a while and then outlives its usefulness.”¹⁴¹ Implementing this recommendation will be difficult, as it requires significant compromise and collaboration to obtain consensus among multiple leaders, stakeholders, and managers.

3. Continue Process, Mission, Values, Leadership Support

- Impact: 0% change, 11% overall
 - Continue Process: 3.50%
 - Mission Statement: 4.50%
 - Organizational Values: 3.00%
- Cost: minimal
- Difficulty: minimal

Though difficult at first, agreeing on the planning process, developing a mission statement, and identifying organizational values has stood the test of time and are still relevant today. The planning process should implement the recommendations in this chapter. The mission statement and organizational values should be reviewed every five

¹⁴¹ Satell, “Evolution of Strategy,” 2.

years to ensure they reflect what the FDNY is doing at the time. Continued leadership support is critical to the success of strategic planning in the FDNY.

B. FORMULATION

1. Formulate an Overall Strategy to Achieve the Vision

- Impact: 2.40% overall (formulate overall strategy)
- Cost: negligible
- Difficulty: significant

Defining the strategy provides a framework for the development of goals to realize the vision, and for decision-making on objectives and tactics to accomplish it. A well-defined strategy is also necessary to create appropriate performance metrics for the evaluation of both Department and strategic plan performance.¹⁴² Implementing this recommendation will be difficult, as it requires significant compromise and collaboration to obtain consensus among multiple leaders, stakeholders, and managers.

2. Increase and Broaden Input and Inclusion

- Impact: 7.30% overall
 - Include external perspective: 3.75%
 - Inclusion of managers: 1.95%
 - Inclusion of lower-level staff: 1.60%
- Cost: high if external consulting, low if not
- Difficulty: moderate

Several recommendations combine to have a significant positive impact on the overall strategic planning process by broadening input and inclusion at the FDNY.

a. Include External Perspective

Including external perspective had the greatest potential impact of all the elements in the strategic planning process, at 3.75%. The quality of the McKinsey and BCG reports highlights the benefit of external perspective. The experience and tools outside

¹⁴² Edwards, “Strategic Planning in Local Government,” 27.

consultants of this caliber bring are unmatched within public safety organizations. Yet the benefit of external perspective is not confined to experience and tools; it is often simply having a different set of eyes—unencumbered by the tradition, culture, and history of the organization—view a problem and recommend a solution. The FDNY should bring competent members of other agencies into the process and offer to do the same for those organizations.

b. Increase/Broaden Inclusion in Strategic Plan Workgroup

The FDNY should revert to the two-tiered planning group concept (POC/AG and PWG) that it used for its first four plans, and expand the PWG to include representatives from all bureaus and significant commands. Incorporate the McKinsey and BCG practices of multiple interviews and brainstorming sessions. Implementation may be resisted, as strategic planning can inherently reduce executive power by encouraging involvement throughout the organization, empowering others to make decisions. This shifts some decision-making to the participants and away from upper management.¹⁴³

c. Strategic Plan from Bureaus and Commands

Elicit input from all bureaus and commands with an electronic fillable “mini-strategic plan” form designed to encourage strategic thinking and align bureau or command planning with the overall strategic plan. Hold designated bureau heads or commanders responsible and accountable for completion at specific intervals aligned with the strategic planning process.

d. Supervisor/Manager Survey

Elicit input from all supervisors with an electronic fillable survey emailed to them, designed to encourage participation and provide an avenue for the supervisors to express ideas to leaders and planners without being filtered through the normal chain-of-command approval process.

¹⁴³ Young, Reynolds, and Harris, “Organizational Strategic Planning and Execution,” 85.

e. All-Employee Survey

Elicit input and feedback from all employees via an electronic survey at the mandated yearly medicals. All members already complete three health surveys, adding an additional one at the same time would not seem as intrusive as a distinct and separate survey, and expected compliance would be much higher. Ensuring all bureaus have the opportunity to participate could leverage support for this survey, generating metrics applicable to their goals. For example, a fifty-question survey could include ten questions from each of five bureaus. Respondents should be assured that survey results will be blind, but the data should be able to be categorized to functional area and title. Every member of the department would participate yearly. The data points generated would provide feedback for as many bureaus and commands that participated and better inform policy and procedure.

3. Continue Internal Analysis, Internal Stakeholder Analysis, Inclusion of Leaders

- Impact: 0% change, 7.75% overall
 - Internal Analysis: 3.75%
 - Internal Stakeholder Analysis: 2.67%
 - Inclusion of Leaders: 3.50%
- Cost: minimal
- Difficulty: minimal

The FDNY is keenly aware of their core competencies and internal capacity and capabilities. Leadership remains an integral part of the strategic planning process. Formalizing and documenting internal analyses would improve the process.

C. PLANNING

Recommendations to improve elements of the planning functional category are addressed in the “Management” recommendations section (Section E).

D. IMPLEMENTATION

1. Project Axiom Analysis

- Impact: significant
- Cost: negligible
- Difficulty: moderate

The following two implementation recommendations arose from the secondary analysis—specifically, from exploring why the BCG Project Axiom recommendations were not implemented. Though they do not have impact percentage assigned to them, Project Axiom scored 27% higher than the FD-SPP overall (comparing the same elements to the PSPP).

a. Align Planning Cycle with Election Cycle/Renew Every Two Years

- Cost: negligible
- Difficulty: moderate

Aligning the FDNY strategic plans to begin one year into each election cycle, and renewing the plan every two years, allows the new administration time to formulate its plan and two years to implement it before starting the process anew. Short-term goals extend one year into the next administration, medium- and long-term goals are course-corrected every two years and extend into the next administration and beyond. The entire strategic planning process would not have to be completed every two years, and the review/revision of vision, mission, and values should occur every other plan (four years), falling one year into each administration.

b. Pursue Alternate Revenue Sources

- Cost: moderate
- Difficulty: moderate

The FDNY should consider alternate revenue sources by exploring Project Axiom recommendations to increase the Department's adaptability and flexibility of service,

maximizing its value to the city and its citizens.¹⁴⁴ As Project Axiom indicates, the FDNY should leverage its unparalleled brand appeal and other marketable qualities, in addition to its unique competencies that could give it competitive advantage in the evolving threat and medical environments. Implementing this recommendation will be moderately difficult, as it requires consensus among the multiple leaders, stakeholders, and managers.

2. Feedback Loop

- Impact: 1.60% overall
- Cost: negligible
- Difficulty: moderate

The feedback loop in the FD-SPP is built in to the accountability process and in each planning cycle. Though the FDNY does an excellent job allowing both mid-course alterations and parallel development of initiatives that were not included in the strategic plan, this process should be formalized and documented more thoroughly.

3. Continue Action and Implementation Plans

- Impact: 1.34% change, 6.66% overall
 - Implement Action Plan: 0.67%
 - Organizational Values: 0.67%
- Cost: minimal
- Difficulty: moderate

Implementing the recommendations in the strategic plans is a strong point for the FDNY. They need little improvement and should continue on their same course.

E. MANAGEMENT

Management of the strategic planning process, by nature, touches many parts of the process and is a nebulous concept at the FDNY. Other than the director of the Strategic Planning Unit (a unit staffed by one, the aforementioned director), there is no

¹⁴⁴ Boston Consulting Group, *Project Axiom*, 56, 58, SC1 Appendix.

overriding or coordinating body that ensures the process of strategic planning effectively continues in this large organization. Remarkably, the process does continue—a testament to the process that was put in place eleven years ago and to the commitment leadership has made to its concept.

1. Expand and Rename the FDNY Strategic Planning Unit

- Impact: 20.28%
 - Analysis: 5.4%
 - Planning: 5.9%
 - Evaluation: 8.98%
- Cost: moderate
- Difficulty: significant

The FDNY should expand the Strategic Planning Unit and rename it the “Strategic Management” Unit, taking on all the functions related to the strategic planning process. The impact of this recommendation would be tremendous, as it would positively impact 11 of the elements in the PSPP with a potential 20.28% improvement in total. The second and third order outcomes of implementing this recommendation are incalculable.

Up-and-coming leaders in the FDNY should staff the expansion. They would do two-year rotations corresponding with the planning cycle, providing them with an opportunity to gain a more global perspective of the FDNY and ownership of a specific strategic plan, and providing the Strategic Management Unit with field perspective.

Expanding and developing a dedicated strategic management unit can support and facilitate strategic thinking throughout the strategic planning process. It can research, collate, analyze, and provide relevant data and topical information at any point in the process. The unit can help formulate strategy, articulate the strategy as a plan, and disseminate the plan throughout the organization.

Grant studied the ten leading oil and gas oil majors (as listed in the 1997 *Fortune Global 500*) and noted that “all of the companies possessed a corporate staff unit

responsible for strategic planning headed by a vice president or a director of corporate planning or strategy,” whose functions included:

- Provide technical and administrative support to strategic management activities;
- Prepare market, economic and political forecasts, competitor analysis, risk analysis and other research of the business environment to assist planning through the company;
- Foster communication and dialog between corporate and business management; and
- Act as internal consultants concentrating expertise about strategy analysis and strategic planning techniques.¹⁴⁵

Mintzberg indicates strategic planners should “supply the analysis or hard data that strategic thinking requires...they should act as catalysts...aiding and encouraging managers to think strategically. They can be programmers of a strategy, helping to specify the series of concrete steps needed to carry out the vision.”¹⁴⁶ The Strategic Management Unit would have four functions: analysis, planning, evaluation, and facilitation.

The following recommendations are not predicated on the primary management recommendation to expand and rename the strategic planning unit. They should be considered even if the primary recommendation is not. However, implementing the primary recommendation would facilitate implementation of all of them.

a. Analysis (Formulation)

- Impact: 5.40% overall
 - External analysis: 3.20%
 - External stakeholder analysis: 2.20%
- Cost: moderate
- Difficulty: moderate

¹⁴⁵ Robert M. Grant, “Strategic Planning in a Turbulent Environment: Evidence from the Oil Majors,” *Strategic Management Journal* 24, no. 6 (June 2003): 496, 500–501, doi:10.1002/smj.314.

¹⁴⁶ Mintzberg, “The Fall and Rise of Strategic Planning,” 108.

There are four elements of the PSPP that involve analysis, all of which could be handled by the Strategic Management Unit: internal and external analysis, and internal and external *stakeholder* analysis. The FD-SPP attained 100% scores in both internal analyses, as the contributors to the process were acutely aware of internal capability and capacity. The Strategic Management Unit could focus on the external environment with analytical capability, experience, and responsibility that would ensure both external analyses not currently performed within the FD-SPP are accomplished.

b. Planning (Formulation and Planning)

- Impact: 5.90% overall
 - Formulate goals: 1.70%
 - Develop objectives: 1.60%
 - Develop strategic plan: 1.30%
 - Develop action plan: 0.70%
 - Develop implementation plan: 0.60%
- Cost: low
- Difficulty: moderate

There are five elements of the PSPP that dedicated planners in the Strategic Management Unit could ensure are accomplished appropriately and professionally: formulate goals, develop strategic plan, develop objectives, develop action plan, and develop implementation plan. Having dedicated, trained, and experienced planners would facilitate completion of these elements, ensuring that they coordinate with the overall plan. This is especially important with developing goals and objectives (as opposed to formulating them), ensuring they comply with the SMART acronym (specific, measurable, actionable, realistic, and timed) so metrics can be established to properly evaluate the process.

c. Evaluation (Management)

- Impact: 8.98% overall
 - Evaluate outcomes: 3.25%
 - Evaluate benchmarks: 2.13%

- Targets (milestones): 1.80%
- Evaluate goal/objective attainment: 1.80%
- Cost: moderate
- Difficulty: moderate

There are six elements that fall under the evaluation role that the Strategic Management Unit could perform: accountability and report externally are already being handled well by the FD-SPP. Evaluate outcomes and benchmarks both have very high potential impact if improved, and evaluate targets (milestones) and goal/objective attainment also could have significant impact if improved. Having a dedicated unit with the experience and tools to monitor and keep track of the metrics required to objectively assess and report on these elements would help ensure they were on schedule and on target, and allow leaders to hold responsible parties accountable.

- *Evaluate outcomes.* It is important that FDNY evaluate outcomes in addition to outputs. Outcomes are what is actually being accomplished—what the FDNY is getting done, not just what it is doing. Evaluating outcomes is the only way to determine the successful accomplishment of goals.
- *Evaluate benchmarks.* The Strategic Planning Unit can evaluate FDNY performance benchmarks while conducting the external analysis.
- *Targets (milestones).* The Strategic Planning Unit would monitor and track performance to target on attaining objectives and accomplishing goals.
- *Qualify goal accomplishment.* In order to evaluate outcomes, goals must be presented in a way that they can be qualifiedly measured. Outcome metrics for goal accomplishment or a cumulative measure of weighted objective attainment must be established.
- *Quantify objective attainment.* In order to evaluate objective attainment, output metrics or a cumulative measure of weighted task attainment must be established.

d. *Facilitation*

- Impact: not quantifiable
- Cost: moderate
- Difficulty: moderate

The Strategic Management Unit would facilitate cross-sectional and multi-level communication, collaboration, and education on strategy and strategic thinking. The Unit should define the concepts of strategy and strategic plan/planning, assisting and educating employees at all levels when they should be used in a document or presentation. They should monitor information flow throughout the FDNY to discover when the concepts are being used incorrectly, and correct and educate those who do so. This would help to reduce confusion regarding the terms and ensure that all parts of the FDNY are appropriately applying them.

The strategic management unit should be certified in the use of planning techniques and structured planning tools designed to encourage strategic thinking, increase strategic awareness, and help formulate solutions to a range of potential futures the FDNY may face. The unit should conduct exercises utilizing these tools with diverse, cross-sectional groups of managers and leaders. They should explore leveraging existing computer-based planning exercise programs that allow managers and leaders to participate asymmetrically, reducing the need to meet at a specific place or time. The Unit should incorporate these tools and its knowledge of them into group discussions and brainstorming sessions in the strategic plan formulation aspect of the strategic planning process.

2. Continue Accountability and Report Externally

- Impact: 0.67% change, 6.08% overall
 - Accountability: 0.67%
 - Report Externally: 0.00%
- Cost: minimal
- Difficulty: minimal

Accountability has been a cornerstone of the FD-SPP, with the quarterly review process ensuring responsible managers keep projects on target, though several have slipped through the cracks. Formalizing and documenting the accountability process would provide increased motivation and metrics to analyze the strategic plan's

performance. The FDNY prints and distributes copies of their strategic plans, and posts electronic copies on their website.

F. CHAPTER CONCLUSION

This chapter presented recommendations for improving the strategic planning process at the FDNY along with an explanation of their impact, cost, and difficulty to implement. The recommendations are listed within the five functional categories used throughout this thesis, though several of them overlap other functional areas.

Implementing these recommendations will align the FDNY strategic planning process elements with those in the preferred strategic planning process.

G. RECOMMENDATIONS FOR FUTURE RESEARCH

This thesis explored the strategic planning process at the FDNY during the fifteen years since September 11, 2001, providing significant insight into the process developed and implemented in a unique public service agency in a unique environment. Many lessons can be taken from this research that may be applied in other public service agencies. More comparative research is required on different approaches from different agencies in different environments.

Additionally, there is a real shortage of research on the effectiveness of strategic planning in public service agencies. Though legitimate opinions abound regarding this topic, there is very little true research on the efficacy of the process. More research is needed to provide empirical evidence for the practice of strategic planning in public service agencies and whether it should be continued, expanded, or discontinued in the future.

H. CONCLUSIONS

Strategic planning at the Fire Department of the City of New York was born out of the tragedy of 9/11, when 343 of its members paid the ultimate sacrifice, along with over 2,400 other innocent people. It continues today as FDNY members continue to pay with their lives, a total of 127 since 9/11 (as of September 2016) as a result of illnesses

secondary to working at ground zero, along with hundreds of other innocent people.¹⁴⁷ The FDNY made a commitment to strategic planning to help guide the organization through the dramatic changes required to adequately respond to the new asymmetric threat that accompanied the post-9/11 era. The Department continues its commitment to strategic planning to navigate the continuous improvement necessary to adequately respond to the constantly evolving threat and demand environment in the future.

The research question of this thesis was: How did the FDNY develop and implement formal strategic plans in the context of their unique operating environment after September 11, 2001, and what changes are required to ensure its relevance in current and future environments? In response to a recommendation in the McKinsey & Company report, *Increasing the FDNY's Preparedness*, the FDNY developed and implemented a strategic planning process that produced a formal strategic plan. This process combines elements of the pre-active and re-active strategy formulation categories defined in the literature review. It is explicit in that goals and objectives are delineated in a formal plan, and implicit in that a vision of the future state and an overall strategy are not elucidated in the formal plan; and it is emergent in that there is a built-in feedback loop within each planning cycle. The process, little changed since its inception, has produced a total of five FDNY strategic plans over the past twelve years.

The all-hazard environment in which the FDNY operates continues to evolve after 9/11. Significant weather events, including blizzards, hurricanes, and Super Storm Sandy, have challenged the FDNY's capabilities and magnified the threat of global climate change. Terrorism keeps evolving; the use of fire as a weapon and active shooter tactics push the boundaries of the FDNY's response paradigms. Its core responsibilities are changing, with fire-related incidents dropping steadily and medical incidents rising significantly. Additionally, the FDNY continues to experience mission creep into other domains of public service, including a significant increase in building inspection responsibilities and reported natural gas leaks.

¹⁴⁷ "FDNY Holds Memorial Service for 15th Anniversary of September 11th," FDNY, September 8, 2016, <http://www1.nyc.gov/site/fdny/news/article.page?id=no4116&permalinkName=fdny-holds-memorial-service-15th-anniversary-september-11th#/0>.

The FDNY has risen to all these challenges, analyzing and adapting to threats, innovating and adopting new technology, improvising and adjusting tactics, and modifying and amending operations. However, in the twelve years since its first strategic plan, strategic planning at the FDNY has not evolved to include a long-term perspective with future-oriented goals and effective performance metrics to stay ahead of the evolving environment.

Current theories on strategic planning consider the planning process itself as more important to the organization than the plans they produce. The process can encourage and facilitate strategic thinking throughout the FDNY. By improving strategic thinking the FDNY can develop the important combination of creative and analytical perspective in leaders and managers to synthesize strategies for its future. The recommendations all focus on improving the strategic planning process and strategic thinking. Implementing them will re-align strategic planning, allowing it to create more effective strategic plans and encourage strategic thinking now and in the future. The revised process that results can serve as a template for strategic planning in other public service agencies.

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APPENDIX A. ANNUAL RETIREMENT RATE

Year	Service	3/4 Disability	Disability	Schoeck	Total
1992	74	181	19	19	293
1993	216	19	37	37	309
1994	204	183	16	45	448
1995	219	276	18	56	569
1996	156	211	14	43	424
1997	161	186	3	42	392
1998	108	160	5	21	294
1999	265	285	18	28	596
2000	171	315	8	24	518
2001	191	324	5	17	537
Average	177	214	14	33	438

Year	Service	3/4 Disability	WTC	Disability	Schoeck	Total
2002	570	637	2	5	24	1238
2003	226	458	2	3	14	703
Average	398	548	2	4	19	971

Year	Service	3/4 Disability	WTC	Disability	Schoeck	Total
2004	144	362	2	2	3	513
2005	115	386	3	0	1	505
2006	122	360	32	2	5	521
2007	82	304	155	0	4	545
2008	42	219	192	0	4	457
2009	63	164	184	0	0	411
2010	78	144	108	0	0	330
Average	92	277	97	1	2	469

Data retrieved from internal FDNY documents. WTC for 2004–2005 were not included in WTC average calculation as the WTC compensation law was not passed until late 2006.

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APPENDIX B. PARTICIPATION BY HIERARCHY

*	Participant	2004-05	2007-08	2009-10	2011-13	2015-17
1	Fire Commissioner (FC)	POC	POC	AG	AG	SPG
	Counsel and Senior Policy Advisor					SPG
	Chief Diversity/Inclusion Officer					SPG
2	First Deputy FC			AG	AG	SPG
	Chief of Department	POC	POC	AG	AG	SPG
	Chief of Staff					SPG
3	Deputy FC of Legal and Intergovernmental Affairs and Management Initiatives	PWG	PWG	PWG	PWG	SPG
	Deputy FC of Strategic Planning and Policy			AG	AG	SPG
	Deputy FC of Technology and Support Services			PWG	PWG	
	Deputy FC of Public Information			PWG	PWG	SPG
	Deputy FC of Administration					SPG
4	Assistant Commissioner of Budget and Finance			PWG	PWG	
	Assistant Commissioner of External Affairs					SPG
	Chief of Fire Operations			AG	AG	
	Chief of EMS		PWG	AG	AG	
	Assistant Chief of Operations			PWG	PWG	
5	Assistant Chief/Deputy Assistant Chief (DAC) Borough Commander	PWG-2	PWG-2			
	DAC of Planning and Strategy	PWG-2	PWG	AG	AG	
	DAC of Counterterrorism and Emergency Preparedness		PWG			
6	Associate Commissioner for Management Initiatives	PWG	PWG			
	Associate Commissioner for Intergovernmental Affairs		PWG			
	Director of Management Analysis and Planning	PWG	PWG			
	Director of Strategic Planning	PWG	PWG	AG	AG	SPG

POC	Planning Oversight Committee	PWG	Planning Work Group
AG	Accountability Group	PWG-2	Two participants of title
	Title did not exist at that time	SPG	Strategic Planning Group
* Hierarchical grouping based on FDNY organization chart at that time			

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APPENDIX C. OBJECTIVE COMPLETION

Legend	
	Response Operations/Service Delivery
	Health and Safety
	Planning, Management, Organizational Development
	Diversity and Inclusion
	Fire Prevention/Safety Education, Community Engagement
	Not Started
	In Progress
	Completed

McKinsey Recommendations—Released August 2002		2002	2003	2004	2005	2006
		McKinsey		FD 1		
M 1	Operationally					
M 1.1	Expand use of the Incident Command System			FD1.1.1		
M 1.2	Further develop the Fire Department Operations Center			FD1.6.1		
M 1.3	Create Incident Management Teams			FD1.1.1		
M 1.4	Create and fully deploy a flexible recall procedure			FD1.1.2		
M 1.5	Seek formal mutual aide agreements for Fire Operations			FD1.1.3		
M 1.6	Modify and enforce staging protocols					
M 1.7	Expand Hazmat/Heavy Rescue/Marine capabilities			FD1.1.4	FD1.1.5	
M 2	Planning and Management					
M 2.1	Enhance planning/management processes, create POC					
M 2.1.1	Produce formal Annual Plan to track and manage performance					
M 2.1.2	Track progress of ongoing FDNY initiatives					
M 2.1.3	Approve new initiatives throughout the year					
M 2.2	Expand and reorganize the Operational Planning Unit					
M 2.2.1	Conduct a comprehensive risk assessment					
M 2.2.2	Develop and maintain an FDNY All-Hazards Emergency Response Plan					
M 2.2.3	Expand technical capabilities-maps, org charts, databases					
M 2.2.4	Lead inter-agency coordination at the operational level					
M 2.2.5	Continue to perform existing operational support functions					
M 3	Improve communications and technology capabilities					
M 3.1	Revamp the Communications and Technology Management Process					
M 3.2.1	Improve communications capabilities					
M 3.2.2	Improve ability to receive and disseminate critical incident information					
M 3.2.3	Give chief officers at incident scenes better information and personnel tracking					
M 3.2.4	Improve EMS's capability to track patients during large-scale incidents					
M 4	Enhance system to provide family and member support services					
M 4.1	Develop a Support Services Committee to create and manage the support system					

FD 1	FDNY Strategic Plan One: 2004–2005—Released March 2004	2004	2005	2006
		FD 1		
FD 1.1	Improve Emergency Response Operations			
FD 1.1.1	Continue integration of Incident Command System and Incident Management Teams			
FD 1.1.2	Further develop and automate the Department's comprehensive recall program			
FD 1.1.3	Enhance the Department's mutual-aid program			
FD 1.1.4	Enhance the capabilities of the Special Operations Command (SOC)			
FD 1.1.5	Increase Marine capabilities to respond to heightened environment/increased water-borne traffic			
FD 1.1.6	Enhance preparedness planning to address new threats and complex, long-term challenges			
FD 1.2	Enhance Health and Safety of FDNY Members			
FD 1.2.1	Develop an improved Firefighter/EMS injury and fatality prevention and investigation program			
FD 1.2.2	Develop an enhanced Fire/EMS apparatus accident prevention and reduction program			
FD 1.2.3	Develop standards to meet training needs of Firefighters, EMTs/Paramedics, Fire and EMS Officers			
FD 1.3	Strengthen Management and Organizational Development			
FD 1.3.1	Determine EMS/Fire Operations more efficiently managed to improve performance and service			
FD 1.3.2	Increase the managerial capabilities and expertise through advanced leadership development			
FD 1.3.3	Provide more comprehensive support services to FDNY families and members			
FD 1.4	Increase Diversity			
FD 1.4.1	Develop a comprehensive written plan incorporating ongoing and new recruitment initiatives			
FD 1.4.2	Develop/expand outreach/mentorship to target minority young adults/women interest in FF/EMS			
FD 1.5	Improve Fire Prevention and Safety Education			
FD 1.5.1	Develop new safety requirements and evacuation plan procedures for high-rise buildings			
FD 1.5.2	Integrate fire prevention/safety education projects to ensure messages reach communities at risk			
FD 1.6	Advance Technology			
FD 1.6.1	Complete upgrade of the Fire Department Operations Center (FDOC)			
FD 1.6.2	Develop electronic wireless command post boards			
FD 1.6.3	Obtain a computerized unit deployment and tracking model for Fire and EMS resources			
FD 1.6.4	Implement a second EMS Citywide command channel for large incidents			

FD 2	FDNY Strategic Plan Two: 2007–2008—Released February 2007	2007	2008
		FD 2	
FD 2.1	Improve Emergency Response Operations		
FD 2.1.1	Implement initiatives recommended by the Fire/EMS Integration Plan Task Force		
FD 2.1.2	Develop Network-Centric Command to provide Incident Commanders with on-scene critical information		
FD 2.1.3	Extend and enhance training for Probationary Firefighters		
FD 2.1.4	Training to ensure maintenance and sustainability of core/newly acquired specialized competencies		
FD 2.1.5	Continuity of Operations Plan (COOP) to ensure continuous and uninterrupted delivery of critical services		
FD 2.2	Enhance Health and Safety of FDNY Members		
FD 2.2.1	Provide World Trade Center monitoring of active and retired members		
FD 2.2.2	Enhance operational safety management and behavior		
FD 2.2.3	Develop procedures to apply water to live electricity at Consolidated Edison facilities		
FD 2.3	Strengthen Management and Organizational Development		
FD 2.3.1	Implement an enhanced Performance Management System for mission-critical functions		
FD 2.3.2	Develop a Battalion Chief Training Day program and a Deputy Chief Development program		
FD 2.3.3	Develop a Department-wide internal communication strategy/restructuring and utilizing new technologies		
FD 2.4	Increase Diversity		
FD 2.4.1	Continue targeted recruitment for future FF civil service exams: young men/women of diverse backgrounds		
FD 2.4.2	Develop/implement ongoing targeted recruitment for EMS to maintain/increase diverse young men/women		
FD 2.4.3	Expand outreach/mentoring in diverse communities: increase visibility/FDNY career opportunities FF/EMS		
FD 2.5	Improve Fire Prevention and Safety Education		
FD 2.5.1	Implement new safety requirements and evacuation plan procedures for commercial high-rise buildings		
FD 2.5.2	Integrate fire prevention/community safety education programs, expand to other relevant safety topics		

FD 3	FDNY Strategic Plan Three: 2009–2010—Released May 2009	2009	2010
		FD 3	
FD 3.1	Improve Emergency Response Operations		
FD 3.1.1	Research/pilot/expand new/innovative FF techniques enhance operational tactics, response, ICS		
FD 3.1.2	Advance electronic FF Locator, component of a Electronic Incident Management System		
FD 3.1.3	Improve on-scene handie-talkie mayday tracking		
FD 3.1.4	Expand the Marine Operations' capacity for emergency response		
FD 3.1.5	Improve the survivability of cardiac patients through public service prepare continuum		
FD 3.1.6	Initiate FDNY New York City Project Hypothermia		
FD 3.1.7	Improve survivability from CO and cyanide toxicity due to smoke inhalation		
FD 3.1.8	Improve EMS response to patients suffering from cyanide toxicity		
FD 3.2	Enhance the Health and Safety of FDNY Members		
FD 3.2.1	Further promote operational safety management and behavior by reinforcing the FDNY safety culture		
FD 3.2.2	Implement "green" initiatives Department-wide		
FD 3.2.3	Continue the World Trade Center Medical Monitoring and Treatment Programs		
FD 3.3	Strengthen Management and Organizational Development		
FD 3.3.1	Develop "Coordinated Building Inspection and Data Analysis System" (CBIDAS)		
FD 3.3.2	Establish a Leadership Development Program for Staff Chiefs		
FD 3.3.3	Continue NIMS/NRF/improve overall comm w/in Dept., kiosks at firehouse and EMS stations		
FD 3.3.4	Continue to evaluate the EMS career ladder within the Department		
FD 3.4	Increase Diversity		
FD 3.4.1	Targeted recruitment for future FF civil service exams: young men/women of diverse backgrounds		
FD 3.4.2	Develop/implement ongoing targeted recruitment for EMS to increase diverse young men/women		
FD 3.4.3	Expand outreach/mentoring in diverse communities: increase visibility/FDNY career opportunities		
FD 3.5	Improve Fire Prevention and Safety Education		
FD 3.5.1	Implement a risk-based inspection program		
FD 3.5.2	Continue to implement the review and approval of EAPs for commercial high-rise buildings		
FD 3.5.3	Expand multi-lingual fire safety education programs and community outreach		

FD 4	FDNY Strategic Plan Four: 2011–2013—Released May 2011	2011	2012	2013
		FD 4		
FD 4.1	Improve Emergency Response Operations			
FD 4.1.1	Key tech projects and expand network ops (CBIDAS, Electronic Riding List, EFAS, ECB, ePCR)			
FD 4.1.2	Develop a five-year strategic plan for the Bureau of Communications			
FD 4.1.3	Increase FDNY representation at the regional, national, and international levels			
FD 4.1.4	Continue to implement the FDNY 2010 Strategic Plan			
FD 4.1.5	Expand terrorism and disaster preparedness training through intra-and inter-agency exercises			
FD 4.2	Enhance the Health and Safety of Members			
FD 4.2.1	Promote the FDNY "culture of safety" to reduce accidents and injuries			
FD 4.2.2	Continue the World Trade Center Medical Monitoring and Treatment Program			
FD 4.2.3	Improve member's physical health and develop a wellness and prevention program to prevent illness			
FD 4.3	Strengthen Management and Organizational Development			
FD 4.3.1	Further leadership capability through management training opportunities FOMI, ALC, CLP, NPS			
FD 4.3.2	Leadership training for EMS Officer, joint FF/EMS training to improve comm and coord medical			
FD 4.3.3	Develop a Technology Strategic Plan			
FD 4.4	Increase Diversity			
FD 4.4.1	Advance recruitment, retention, promotion for men/women of diverse background in FF/EMS			
FD 4.5	Improve Fire Prevention and Safety Education			
FD 4.5.1	Expand fire safety program to increase safety among special populations, including the disabled			
FD 4.5.2	Improve customer service in the Bureau of Fire Prevention			

FD 5	FDNY Strategic Plan Five: 2015–2017—Released September 2015	2015	2016
		FD 5	
FD 5.1	Safety: The Public, Firefighters and EMTs and Paramedics		
FD 5.1.1	Outreach community, agencies, private/non-profit awareness/participate FD fire/life safety resources		
FD 5.1.2	Integrated inj reporting data, med records, WTC monitoring, work comp, disability track trends		
FD 5.1.3	Upgrade customer service, inspect unit for daycare facilities, improve fire safety business services		
FD 5.1.4	Deploy new apparatus, monitoring and metering devices, PPE, thermal imaging for firefighting		
FD 5.1.5	Expand executive/master's programs, college-equivalent in-house ed, joint programs		
FD 5.1.6	Establish Risk Management Group (Fire/EMS OPS, BOT, Safety, BFP, BHS, MAP, BTDS)		
FD 5.2	Integrate Fire and EMS to Enhance the FDNY's Ability to Deliver Emergency Medical Service		
FD 5.2.1	Add EMS tours in high-resp areas, Officers to manage EMS facilitate Fire/EMS ops at incidents		
FD 5.2.2	Automate notification create EMS “decision dispatcher” co-locate dispatchers by borough		
FD 5.2.3	Reduce response times to priority 1–3 calls by expanding role and availability of FD first responders		
FD 5.2.4	Collaborate with DoITT to complete FDCAD and integrate Fire and EMS dispatching at both PSACs		
FD 5.2.5	Develop public/private partnerships provide options for non-life threatening emergencies		
FD 5.3	Diversity and Inclusion		
FD 5.3.1	Enhance FDNY Cadet, mentorship programs, provide additional opportunities to inc. diversity		
FD 5.3.2	Enlist experts to train all staff inclusion/diversity, promote value of diverse workforce		
FD 5.3.3	Identify additional recruitment sources to increase ranks of women, people of color and veterans		
FD 5.3.4	Increase upper-rank diversity thru mentorship, leadership; expand higher ed; detail assignments		
FD 5.3.5	Monitor effectiveness of recruit efforts objective metrics and set expectations to meet future goal		
FD 4.1	Improve Service Delivery		
FD 5.4.1	Update guidelines/exp ICS Officers, Batt/Div staff; exp mentor prog, prof development for EMS		
FD 5.4.2	Expand mobile tech for data entry, collection, analysis, comp training; advanced modeling		
FD 5.4.3	Online customer links/auto processes BFP materials, payments, permits; share inspect info in Dept.		
FD 5.4.4	Expand tech rescue new challenges (gas responses, residential high-rises, harbor, waterway, terrorist)		
FD 5.5	Community Engagement		
FD 5.5.1	Open EMS Stations and Firehouses to community for public education about fire and life safety		
FD 5.5.2	Robust Community Affairs Team imp community ties, communicate diverse pop.		
FD 5.5.3	Expand community-based public ed pgm: CPR, first aid, imp health, help each other in emergency		
FD 5.5.4	Measure impact for resource allocation where they can have greatest impact on fire and life safety		

Plan	Total	Y1	Y2	Y3	Y4	Y5	Comp	Tot %	Y1 %	Y2 %	Y3 %	Y4 %	Y5 %
McKinsey2	23	3	7	1	3	5	19	83%	13%	30%	4%	13%	22%
FD SP1	20	3	3	13			19	95%	15%	15%	65%	0%	0%
FD SP2	16	6	4	1	1		12	75%	38%	25%	6%	6%	0%
FD SP3	21	9	4	0	1	2	16	76%	43%	19%	0%	5%	10%
FD SP4	14	6	3	2			11	79%	43%	21%	14%	0%	0%
FD SP5	24	8	3				11	46%	33%	13%	0%	0%	0%

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APPENDIX D. DEFINITION OF TERMS

Strategic	Consequential, organization-wide, long-term, and complex
Goal	Broad, general, tangible and descriptive <i>outcome</i> that is measurable and designed to be <i>accomplished</i> within a timeframe (usually 3–5 years) toward realization of the vision
Objective	Specific, measurable, actionable, realistic, time-bound (SMART) <i>output</i> to be <i>attained</i> within a timeframe (usually 1–2 years) toward accomplishment of the goal
Initiatives	Introductory steps to a new proposal
Tasks	Assigned work to a person, team, or unit
Tactics	Methods used
Strategic Thinking	Analytical and creative ability to synthesize multiple inputs into organization-wide outputs such as vision, strategy, mission, and values
Strategic Plan	A set of broad goals designed to realize the vision within the context of the mission, constrained by the values, and determined by doctrine
Action Plan	A set of specific, measurable, attainable, realistic, and time-bound (SMART) objectives designed to attain the goals of the strategic plan
Implementation Plan	A set of tasks designed to attain the objectives of the action plan, who is responsible, and what milestones must be met
Evaluation Plan	The review process including cadence, metrics for success, and process for adaption
Strategic Planning	Strategic Plan + Action Plan + Implementation Plan + Evaluation Plan
Strategic Planning Process	Strategic Thinking + Strategic Planning
Strategic Management	Coordination of the strategic planning process
Vision	The desired end state of the organization to be <i>realized</i>

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APPENDIX E. LITERARY SOURCES FOR WEIGHTING MATRIX

A number of literature sources referenced in developing the elements of the preferred strategic planning process are listed here.

Boyd and Reuning-Elliott: Seven Practices

- Mission statements
- Trend analysis
- Competitor analysis
- Long-term and short-term goals
- Action plans
- Ongoing evaluation

They later conclude that two of the indicators, trend analysis and competitor analysis, have a lower reliability rating AND are not a reliable measure.¹⁴⁸

Bryson: Strategy Change Cycle

- Initiate and agree on a strategic planning process
- Identify organizational mandates
- Clarify organizational missions and values
- Assess the external and internal environments
- Identify the strategic issues facing the organization
- Formulate strategies to manage the issues
- Review and adopt the strategies or strategic plan
- Establish an effective organizational vision
- Develop an effective implementation process
- Reassess strategies and the strategic planning process¹⁴⁹

¹⁴⁸ Boyd and Reuning-Elliott, "A Measurement Model of Strategic Planning," 184.

¹⁴⁹ Bryson, *Strategic Planning for Public and Nonprofit Organizations*, 32–34.

Poister and Streib: Strategic Planning Big Picture

- Is concerned with identifying and responding to the most fundamental issues facing an organization
- Addresses the subjective question of purpose and the often competing values that influence mission and strategies
- Emphasizes the importance of external trends and forces as they are likely to affect the agency and its mission
- Attempts to be politically realistic by taking into account the concerns and preferences of internal, and especially external, stakeholders
- Relies heavily on the active involvement of senior-level managers and sometimes elected officials, assisted by staff support where needed
- Requires the candid confrontation of critical issues by key participants to build commitment to plans
- Is action oriented and stresses the importance of developing plans for implementing strategies
- Focuses on implementing decisions now in order to position the organization favorably for the future¹⁵⁰

Edwards: Most-Cited Components

- Plan for strategic planning
- State organizational mission/vision/values
- Assess external and internal environments (SWOT)
- Stakeholder assessment
- Identify and analyze issues facing the organization
- State goals for how the organization will face issues
- Create strategies for reaching goals
- Assess feasibility of strategies
- Create and implement action plans¹⁵¹

¹⁵⁰ Poister, Pitts, and Edwards, "Strategic Management Research in the Public Sector."

¹⁵¹ Edwards, "Strategic Planning in Local Government," 20–28.

Edwards: Comprehensive Strategic Planning Processes

- General management capacity
- Good leadership
- Broad participation
- Inclusion of essential elements
- Broad dissemination
- Integration with performance management practices, budgeting, and human resource management
- Evaluate, monitor, and update process¹⁵²

Young, Reynolds, and Harris: Ten Steps to Strategic Planning

- Define planning activities and assignments
- Outline basic content of plan document
- Schedule, organize, and facilitate working sessions with staff and external stakeholders
- Collect information and prepare background materials for use by the working groups
- Record and sum up working session discussions and decisions
- Draft strategic plan document
- Maintain regular communication with management, keep staff and partners informed of planning activities and results¹⁵³

Young, Reynolds, and Harris: Six Essential Elements

- Development of a mission statement
- Assessment of the organization's external needs
- Creation of strategic objectives
- Outcome measurement
- Strategies
- Performance feed-forward
- External outcome, rather than internal outputs, focus¹⁵⁴

¹⁵² Ibid., 18.

¹⁵³ Young, Reynolds, and Harris, "Organizational Strategic Planning and Execution," 91.

¹⁵⁴ Ibid., 88.

Young, Reynolds, and Harris: Five Essential Factors

- Constructive discontent with the status quo
- Measurement of external results
- Leadership and consensus building within the agency
- Collaboration and partnership with stakeholders
- Commitment to finish executing the strategic plan¹⁵⁵

TCC Group: Ten Keys to Successful Strategic Planning for Nonprofit and Foundational Leaders

- A clear and comprehensive grasp of external opportunities and challenges
- A realistic and comprehensive assessment of the organization's strengths and limitations
- An inclusive approach
- An empowered planning committee
- Involvement of senior leadership
- Sharing of responsibility by board and staff members
- Learning from best practices
- Clear priorities and an implementation plan
- Patience
- A commitment to change

TCC Group: Ten Keys, Ten Years Later

- Agree on the reason for planning
- Create a clear CEO vision for the organization
- Develop a strong board–staff relationship based on candor and open communication
- Use data to help ground decision making
- Increase impact by using all the tools in your toolbox
- Learn from the experience of others—good and bad
- Define success and decide how to hold yourself accountable
- Understand your place in the ecosystem in which you operate

¹⁵⁵ Ibid., 63.

- Assess organizational strengths and challenges
- Remember that a strategic plan includes a roadmap for implementing the decisions¹⁵⁶

Steurer and Martinuzzi: Characteristics of Strategic Public Management

- Formal strategy documents completed by flexible strategy processes (embracing formal and informal mechanisms)
- Strategies and plans developed by those responsible for implementation (ideally by involving external stakeholders)
- Cross-sectoral strategic structures, and mechanisms
- Implementation as an integral part of strategy process
- Multi-stakeholder approach facilitates acceptance and ownership of strategy process
- Monitoring, progress reports, external evaluations, and peer reviews support learning in strategy process
- Nonlinear strategic thinking¹⁵⁷

Bram F. Noble: Defining Characteristics

- Leads to strategy for action
- Set in context of broader vision, goals, and objectives
- Asks “what is the preferred process?”
- Backcasts, then forecasts
- Proactive
- Non project-specific
- Broad focus and low level of detail¹⁵⁸

¹⁵⁶ “Ten Keys Ten Years Later,” TCC Group, accessed September 10, 2016, http://www.tccgrp.com/pubs/ten_keys_ten_years.php.

¹⁵⁷ Reinhard Steurer and André Martinuzzi, “Towards a New Pattern of Strategy Formation in the Public Sector: First Experiences with National Strategies for Sustainable Development in Europe,” *Environment and Planning C: Government and Policy* 23, no. 3 (June 1, 2005): 467, doi:10.1068/c0403j.

¹⁵⁸ Bram F. Noble, “Strategic Environmental Assessment: What Is It? & What Makes It Strategic?,” *Journal of Environmental Assessment Policy & Management* 2, no. 2 (June 2000): 204.

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APPENDIX F. COMPARATIVE MATRIX

Table 18. SPP Comparative Analysis Matrix

Process Elements	PSPP		FDNY/PSPP			BCG/PSPP			FDNY/BCG		
	Wt%	PSPP	FD	Wt	Var	BCG	Wt	Var	FD	BCG	Var
Pre-formulation											
Create and Agree on Process	0.035	5	5	5	0	5	5	0	5	5	0
Create Vision Statement	0.033	5	0	0	5	5	5	0	0	5	5
Revise/Create Mission Statement	0.045	7	5	7	0	5	7	0	7	7	0
Identify Organizational Values	0.030	5	5	5	0	5	5	0	5	5	0
Formulation											
Internal Analysis	0.038	6	5	6	0	4	5	1	6	5	-1
External Analysis	0.040	6	1	1	5	4	5	1	1	5	4
Internal Stakeholder Analysis	0.027	4	4	3	1	5	4	0	3	4	1
External Stakeholder Analysis	0.037	6	2	2	3	5	6	0	2	6	3
Formulate Overall Strategy	0.040	6	2	2	4	5	6	0	2	6	4
Formulate Goals	0.043	6	4	5	1	5	6	0	5	6	1
Planning											
Generate Strategic Plan	0.033	5	4	4	1	5	5	0	4	5	1
Develop Objectives	0.040	6	5	6	0	5	6	0	6	6	0
Develop Action Plan	0.035	5	4	4	1	5	5	0	4	6	2
Develop Implementation Plan	0.030	5	4	4	1	5	5	0	4	5	1
Include Feedback Loop	0.040	6	3	4	2	*Not included in analysis					
Implementation											
Implement Action Plan	0.033	5	4	4	1						
Implementation Plan	0.033	5	3	3	2						
Management											
Targets (milestones)	0.030	5	2	2	3						
Responsibility	0.033	5	4	4	1						
Evaluate Goal/Object Attain	0.030	5	3	3	2						
Evaluate Outcomes	0.033	5	0	0	5						
Evaluate Benchmarks	0.027	4	1	1	3						
Report Externally	0.028	4	4	3	1						
Characteristics											
Leadership Support/Involvement	0.033	5	5	5	0						
Future Orientation	0.025	4	2	2	2	5	4	0	2	4	2
Broad Perspective	0.027	4	3	2	2	5	4	0	2	4	2
Inclusion of Leaders	0.035	5	5	5	0	3	3	2	5	3	-2
Inclusion of Managers	0.033	5	2	2	3	3	3	2	2	3	1
Inclusion of Lower Level Staff	0.020	3	1	1	2	1	1	2	1	1	0
Inclusion of External Perspective	0.038	6	0	0	6	4	5	1	0	5	5
Total	1	150	92	94	56	89	92	10	66	93	28
Comparison	FDNY/PSPP				56	BCG/PSPP		10	FDNY/BCG		28

Table 19. SPP Comparative Analysis Matrix Legend

Code	Refers to	Score	Implemented/Quality
PSPP	Preferred Strategic Planning Process	0	Not at all/not applicable
Wt%	Weighting percentage based on PSPP	1	Barely
Wt	Weighted outcome of score to left of column	2	Partially
Var	Variance of weighted score to PCPP score	3	Somewhat
Var2	Variance of weighted FDNY score to BCG score	4	Mostly
BCG	Boston Consulting Group (Project Axiom)	5	Fully
* Was not part of BCG report (since it was not a plan)		BCG used FDNY's existing	

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